

AUGUST 8, 1955

How TOFC Helps Carloadings . . . p. 46

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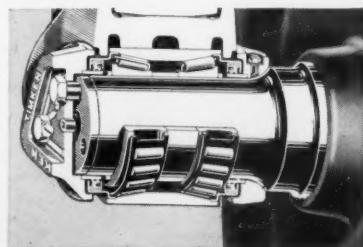
"Roller Freight" cars speed deliveries for Western Maryland shippers by eliminating the number one cause of freight train delays, the hot box problem. Unlike cars with friction bearings, "Roller Freight" cars provide delay-free dependability that gets shipments where they're going on time.

Much as "Roller Freight" means to shipper customers, it can mean still more to the railroads. When they put roller bearings on

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* Van-Car Corporation, which owns these cars, is the car-leasing subsidiary of The Rail-Trailer Co.



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as well as a host of industrial applications. It is readily welded and worked, and holds paint up to 80 pct longer than plain carbon steel. Catalog 353 shows dozens of outstanding applications of Mayari R, some of which probably have a bearing on a problem confronting you. A phone call or note will bring you a copy promptly.

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August 8, 1955

Vol. 139, No. 6

Week at a Glance

Congressional hearings on the Cabinet Report—or, more precisely, on bills to implement recommendations of that report—have been scheduled to begin September 19, before a House subcommittee. 9

Car shortage—actual and potential—is a subject which continues to be as hot as the weather. It has occupied the attention of a Senate subcommittee for several weeks; and brought from GN President John Budd a demand for some change in systems of car distribution. 10, 11

FORUM—"Where were you when the war was on?" Such may be the question asked of suppliers some day in the future, referring to the current "battle" for Cabinet Committee Report legislation. "Active service" in the Railway Progress Institute and/or Federation for Railway Progress can enhance the efforts of the railroads to the benefit of all. 41

Pace setter in station design—that's what they're calling the Santa Fe's Hutchinson, Kan., station, which features the "suburban" theme. 42

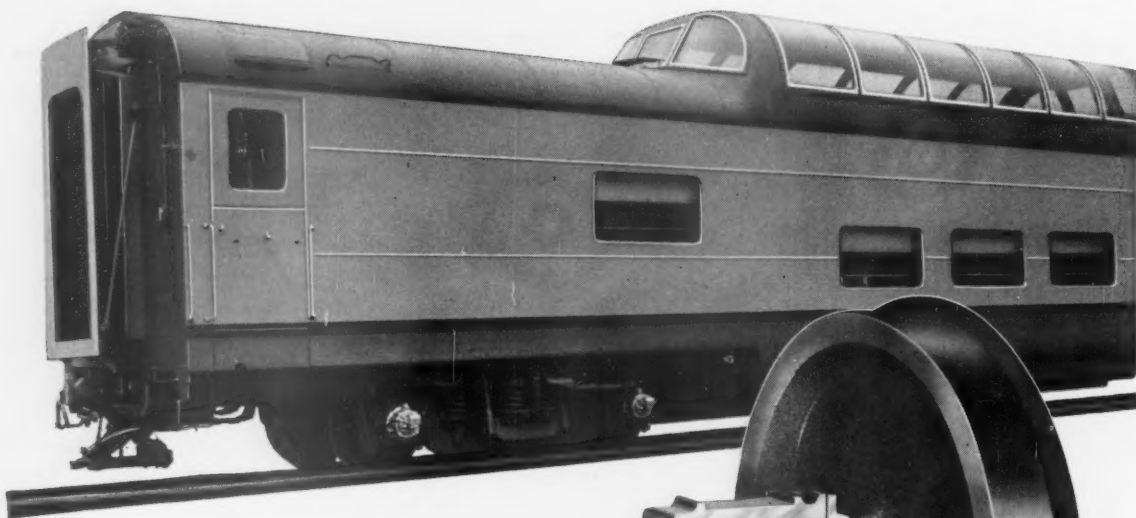
How protection was improved at seven crossings on the C&NW at Oshkosh, Wis., with electric gates, flashing-light signals and traffic direction signs, automatically controlled with part-time manual supervision. 44

TOFC—Helping hand for box cars. Trailer-flat car service on the UP is growing and aiding carload and lcl business. 46

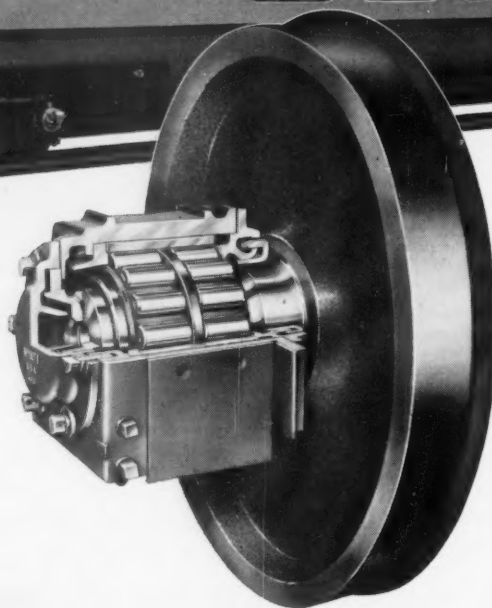
Additives make today's fuels better. Many grades which a few years ago would have given unsatisfactory service are now improved by treatment and in extensive use. 48

How to make "3-o'clock" welds—Making satisfactory welds on the horizontal seam between vertical members

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Current Statistics

Operating revenues, six months	
1955	\$4,820,336,062
1954	4,591,252,244
Operating expenses, six months	
1955	\$3,645,751,965
1954	3,683,934,579
Taxes, six months	
1955	\$ 521,641,721
1954	440,067,072
Net railway operating income, six months	
1955	\$ 526,830,860
1954	342,337,672
Net income, estimated, six months	
1955	\$ 416,000,000
1954	232,000,000
Average price railroad stocks	
August 2, 1955	95.06
August 3, 1954	71.91
Carloadings, revenue freight	
Twenty-nine weeks, 1955	20,236,866
Twenty-nine weeks, 1954	18,450,214
Average daily freight car surplus	
Wk. ended July 30, 1955	5,555
Wk. ended July 31, 1954	84,958
Average daily freight car shortage	
Wk. ended July 30, 1955	15,788
Wk. ended July 31, 1954	268
Freight cars on order	
July 1, 1955	27,102
July 1, 1954	13,860
Freight cars delivered	
Six months, 1955	17,111
Six months, 1954	23,602
Average number of railroad employees	
Mid-June 1955	1,075,084
Mid-June 1954	1,073,847

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Week at a Glance CONTINUED

has been successfully done in butt welding reinforcements to side sills in assembly of box cars. **50**

Listen for that 'phone! New York Central employees are being taught to answer calls quickly, courteously, completely, in system-wide campaign to build good will through proper telephone usage. **53**

BRIEFS

Does the shipper know what kind of cars he wants? In some respects he does. In others he knows what kind of cars he doesn't want. The results of a survey conducted by *Railway Age*, which will appear next week, will illuminate this matter.

Answering commissioners of Division 3 of the ICC, who appealed for shipper cooperation during the current car shortage (*Railway Age*, July 18, page 11), Lowe P. Siddons, president of the National Industrial Traffic League, told league members and the Associated Traffic Clubs of America that "the next thing could be a service order placing penalty charges in the form of demurrage because of a few recalcitrant shippers failing to promptly load or unload their cars." He said he felt that cooperation, as sought by the commissioners, would "forestall the necessity" of such measures.

A searchlight dwarf signal set the cadence for parades during the Shrine's annual convention in Chicago. The signal was installed by the Illinois Central signal department in a seventh floor window of the railroad's annex building, next to Central Station. The flashing-yellow aspect (55 times per min) was visible along Michigan avenue for about two miles north of the station.

Truck traffic salesmen were urged to go "all out" to oppose any and all parts of the Cabinet Committee report on transportation, at a recent meeting of the American Trucking Associations' Customer Relations Council. One trucker who addressed the group even suggested "a campaign to balance the federal budget



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Week at a Glance CONTINUED

with an excise tax on railway equipment and a 6% railroad receipt tax," and that truckers work, at the local level, for "new appraisals" and "adequate taxes" on railroad facilities!

Twenty-five cents an hour — "across the board." That's the latest demand now being served upon major carriers by 11 non-operating unions. Asking that the increase become effective September 1, the unions say they are merely "keeping pace" with wage increases in other industries through such a demand.

The bill to liberalize the making of agreed charges by Canadian railroads has been passed by the Canadian Parliament. Passage was in substantially the form in which the bill was first introduced (*Railway Age*, July 11, page 13), except that truck operators were added to shippers and water carriers as possible complainants against such charges.

The largest public display of modern railroad freight and passenger equipment since the Chicago Railroad Fair will be staged at Sedalia, Mo., for an estimated 500,000 persons attending the Missouri State Fair August 20-28. A diesel locomotive, eight different types of passenger cars and 14 different freight cars will be spotted on fair ground tracks for public inspection—inside and out. Seven roads and the Pullman Company are cooperating in the venture.

Truckers in Southern territory have upped class rates on shipments under 2,000 lb by 20%, subject to maximum increase of 23¢ per cwt. The truck minimum charge went to \$3 per shipment, compared with the rail minimum of \$2.30. The L&N immediately got out a letter to its patrons pointing out the lower rail rates. Appended to the letter was

a table of sample rates to points served by the railroad with direct car service.

More than one railroad of substantial size is known to be giving close critical scrutiny to its management organization, with an eye to improvement. It doesn't take just able men to run a railroad with maximum efficiency—but able men arranged in most effective relationship to each other.

A 5% discount certificate, for use in renting a Hertz car in the Los Angeles area, is now being given with every purchase of a round-trip ticket to Los Angeles from any point on the Santa Fe. Purpose of the move is to provide travelers a complete round-trip discount on all transportation, by matching for car rentals the saving available on a round-trip ticket.

"There are healthy and heartening signs of the New Look in Railroading. . . . Gone is complacency In the limelight now are revolutionary types of passenger equipment. . . . A bold bid to recapture lost traffic is piggybacking. . . . New use is proposed for old properties and for turning liabilities into revenue-producing assets. . . . There is needed additionally a New Look in Regulation of Transportation."—*From an address by Walter J. Tuohy, president, Chesapeake & Ohio, to the 32nd Grand Lodge Convention, Brotherhood of Maintenance of Way Employees.*

"Do everything except use and pay for the service," seems to be the rule for communities faced with prospective loss of passenger trains. Latest demonstration of this theory comes from Oregon, where a 67-relay "pony express" raced an admittedly slow SP local train between Eugene and Roseburg, as a headline-catching protest against discontinuance of the train. The horses, following a shorter route, lost by only a few minutes—but they didn't have to handle mail and express at 40 stations.

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Cabinet Report Hearing Is Set

Subcommittee of House Committee on Interstate Commerce will hold sessions beginning September 19 — Adjourned Congress left no important railroad legislation

House bills to carry out recommendations of President Eisenhower's Cabinet Committee on Transportation Policy and Organization will get a hearing before a subcommittee of the House Committee on Interstate and Foreign Commerce during the period when Congress is in adjournment.

The hearing will begin September 19, according to an announcement made by the subcommittee's chairman, Representative Harris, Democrat of Arkansas, on August 2, the day of the sine die adjournment. The adjourned Congress left no important transport legislation, its major action in that field having been votes which defeated President Eisenhower's highway program and proposed substitutes therefor.

The subcommittee which will hold the September 19 hearings is the Subcommittee on Transportation and Communications, and the bills before it will be H.R.6141 and H.R.6142, identical measures introduced on "by request" bases by the present committee's chairman, Representative Priest, Democrat of Tennessee, and its ranking minority member, Representative Wolverton, Republican of New Jersey. (*Railway Age*, May 16, page 7.)

In writing the Presidential Committee's recommendations into the Interstate Commerce Act, the bills, among other changes, would rewrite the declaration of national transportation policy and provide more rate-making freedom for common carriers. Also, they would sharpen the definitions of

private and contract carriage, repeal the bulk commodity exemption applicable to water carriers, and give the Interstate Commerce Commission power to override state commissions in authorizing abandonments of intra-state railroad services (*Railway Age*, April 25, page 49).

Besieged—Subcommittee Chairman Harris' announcement said the House committee has been "besieged with requests for hearings and consideration" of the bills. In view of that interest in the matter, the subcommittee hearings were scheduled, Mr. Harris added.

He also said that the Presidential Committee's views would be presented by its chairman—Secretary of Commerce Weeks. Also, that a representative from each of the affected transportation agencies "is being invited and expected to comment upon the basic principles and proposals involved in the report as they bear upon the overall national transportation policy and upon the individual agency."

The adjourned session was the first for the present eighty-fourth Congress, which has another year to go. Thus all bills pending at various stages short of final enactment remain alive for consideration at the next regular session which opens in January; or at special sessions if any are called by President Eisenhower.

The only new legislation enacted, which was of direct interest to the railroads, was the Retirement-Act liberalizer (which was H.R.4744) sponsored by railroad labor unions and not op-

posed by the carriers. It restores the maximum spouse's benefit under the act to the same level enjoyed by spouses under the general social security program; and it removes the ban on dual benefits as to survivors, thus permitting survivors of railroad employees to receive full benefits to which they are entitled under both programs.

The enacted bill also makes it clear that railroad retirement and unemployment benefits are exempt from federal or state taxation, garnishment or attachment; and it brings under Civil Service several positions in the Railroad Retirement Board's organization which the board has considered exempt. This provision was opposed by the Eisenhower Administration. The bill was awaiting action by the President last week.

Also enacted in the session's closing days was H.R.6887, extending for another year the provisions of section 108(b) of the Internal Revenue Code of 1954. This provides tax relief for railroads adjusting their debt structure as a result of reorganization.

Bills left pending, in addition to those carrying the Cabinet Report proposals, include the so-called trip-lease bill which is opposed by the railroads. As originally introduced, this would end the ICC's power to prohibit trip-leasing of motor trucks. An amended version (embodied in S.898) has been approved by the Senate Committee on Interstate Commerce.

Also pending are the proposals to amend the Interstate Commerce Act's section 4, as recommended by the ICC in the interest of tariff simplification; to repeal the tax on amounts paid for for-hire transportation; and to further liberalize the Railroad Retirement Act. Listed below, with their sponsors, are other pending bills, which were introduced since the latest previous listing in *Railway Age* of June 27, page 11.

S.2420, to limit hours of service of railroad employees (Magnuson, Wash., "by request").

S.2548, to exempt shipments of live-



LATEST RECIPIENT of a Presidential medal of honor for saving life in railroad service is Louis LaSalle, Boston & Maine fireman, of Concord, N.H. Mr. LaSalle, third from left, received his medal at Washington, D.C., in the presence of his wife and mother, ICC Chairman Hugh Cross (second from left), and New Hampshire Senators Norris Cotton (left) and Styles Bridges.

Briefly . . .

. . . Four "Railroad Days" will be marked at Charleston, W. Va., by the Casey Jones Railroad Unit of the American Topical Association. Cacheted envelopes will be issued October 13 for the B&O; October 14 for the C&O; October 15 for the NYC; and October 16 for the Virginian. Covers, costing 25¢ each, should be ordered from C. J. Keenan, secretary of the unit, 6354 N.E. Cleveland Avenue, Portland 11, Ore.

stock from the tax on transportation of property (Dirksen, Ill.).

S.2636, "to restore the authority of the postmaster general to adjust postage rates for air parcel-post service (Carlson, Kan.).

H.R.7257, to increase the annual compensation of members of the ICC (Simpson, Ill.).

H.R.7634, to provide that amounts

which do not exceed 61 cents shall be exempt from the passenger fare tax (Kean, N.J.).

H.R.7670, to repeal the tax on transportation of persons (Farrington, Alaska).

H.R.7682, to amend part II of the Interstate Commerce Act with respect to regulation of operating schedules of interstate bus line (St. George, N.Y.).

Equipment & Supplies

Car Shortage Hearing Concluded

AAR's Gass tells Senate group better earnings would help solve problem—ICC's Clarke says commission "would welcome" broader powers to cope with situation

"Given adequate earnings, the railroads would not have car supply problems," a Senate subcommittee investigating current car shortages was told at its concluding hearing July 28.

Arthur H. Gass, chairman, Car Service Division, Association of American Railroads, told the subcommittee railroads "could hardly be expected to invest heavily in cars that periodically must sit around unused" in light of the railroads' 3.28% rate of return for 1954.

His testimony followed that of several senators reporting on shortages in their states, Commissioner Owen Clarke of the Interstate Commerce Commission, L. J. Dorr, executive secretary of the National Industrial Traffic League, and several other witnesses complaining of car supply.

The AAR also was represented by Thomas L. Preston, general solicitor. Other witnesses included Michael Fox, president of the Railway Employees' Department, American Federation of Labor; C. J. Harris, executive secretary, Buffalo Corn Exchange; E. L. Peterson, Minneapolis Traffic Association; Freeman Bradford, secretary, Indianapolis Board of Trade; and Angus McDonald, assistant legislative secretary, National Farmers Union.

Commissioner Clarke, following delivery of a prepared statement as reported in *Railway Age*, August 1, page 7, said under questioning by Senator A. S. Monroney, Democrat of Oklahoma, that the ICC "would welcome" broader powers for action in periods of short car supply. He said the commission would favor legislation empowering it to compel railroads to acquire new cars or repair bad order cars; and he reminded the senator that the ICC, since 1947, has asked Congress annually for power to increase the per diem rate in emergencies.

Mr. Gass differed on this point, however, and was supported by Mr. Preston, who said there seemed no need for such authority in view of existing ICC power to issue service orders to

expedite car movement. Mr. Preston also mentioned that penalty rates would hit all railroads, including those making genuine efforts to deal with shortage problems.

Car-building programs now under way were cited by Mr. Gass as indicating the railroads' efforts to provide enough cars to meet traffic demands, and noted that the backlog of cars awaiting heavy repairs has been cut to 4.8%. Referring to complaints concerning car shortages in grain-producing areas, he said the situation has

been aggravated by a large concurrent movement of old grain out of storage and reported that, in the week ended July 16, the roads loaded 74,561 cars with grain, compared with the record week's loading of 79,000 cars achieved in 1949.

Mr. Gass also told the subcommittee that railroads must face—in maintaining adequate car supplies—the problem of car surpluses as well as shortages. In 1954, he said, surpluses ran as high as 140,000 cars per day, while peak shortages have never approached in number the peak surpluses.

"No Accident"—Mr. Fox told the subcommittee the "present unsatisfactory condition of the railways' freight car fleet is no accident, nor is it the result of bad guesses as to needs." It is due, he said, to management policies which fail to provide enough new cars to keep pace with retirements, cause cars that could be rehabilitated to be retired, and cut back maintenance expenditures when revenues fall off regardless of future needs.

He advocated increased construction by individual railroads of new freight cars in their own shops and called for improved maintenance programs to keep bad order cars at a minimum through a program of "employment stabilization" developed in collective bargaining.

The witnesses from Buffalo, Indianapolis and Minneapolis testified mainly as to conditions local to those cities. Mr. McDonald dealt with the situation as it affects agricultural interests.



E-MD to Exhibit Mechanical Reefer at Powerama

Designed for the specific purpose of serving the frozen foods industry is the "Frigifrater," mechanical refrigerator car to be shown for the first time at the General Motors Powerama, in Chicago, from August 31 to September 25. GM's Electro-Motive Division has designed this car to maintain any temperature from 10 deg be-

low zero to 65 above, and also to control humidity.

The Frigifrater utilizes cold-wall refrigeration with air ducts around the all-steel, all-welded cold-wall lining of the car. This inner compartment is cooled with captive refrigerated air circulated with blowers. The dry captive air makes it necessary to have a

defrosting cycle only once every seven days, instead of daily, as required with some other mechanical reefers. Control of the General Motors engine-generator has been greatly simplified. Insulation between the car body and the inner cold wall is an inorganic foam which bonds itself to both surfaces and is claimed to add structural reinforcement to the body. It will not pack down or absorb moisture.

The car body is mounted on the structural steel underframe with fiber supports and cushioning devices that allow it to slide freely within practical limits. This is to protect the car body, refrigeration equipment and lading. The car is designed so the entire body and refrigeration unit can be lifted from the underframe and transported in full operation by ship. Doors were designed so lading can be handled with lift trucks, and yet keep refrigeration losses at a minimum. The doors swing out 13 in., and then roll back along the side of the car.

Other E-MD Exhibits—The Frigfrater will be exhibited at the Powerrama along with the 1,200-hp locomotive and 10 cars of GM's new high-speed, light-weight passenger train. This diesel-electric locomotive also is designed to haul low-slung trains being produced by other car builders. A Union Pacific 2,400-hp passenger unit will be shown, while two Chicago & North Western freight units will demonstrate the completeness of E-MD's remanufacturing plan. One unit will be an FT built early in World War II and now awaiting remanufacturing. The other will be another of this same class of locomotive which has been rebuilt into a modern FP7A. A model SD9, six-motored, 1,750-hp road-switcher and a G12, narrow-gage, 1,310-hp unit being built for service in New Zealand also will be exhibited, as will an SW1200 switcher and one of E-MD's mobile-generator cars. These displays will be part of the exhibition celebrating production of General Motors' 100-millionth diesel horsepower.

of in this area is evidence that even these appeals fail to bring about the desired results."

No Penalty—Mr. Budd explained to the shippers that while there is no penalty for failure to comply with AAR car service rules and orders, there is such a penalty for failure to comply with rules set down by the commission. Because the commission must consider the nation's transport needs as a whole without favoring any one section of the country, "there remains for them the unpleasant task of trying to distribute equitably a shortage of cars."

Bitter Pill—Citing the causes contributing to the current car shortage—including the decline of traffic in 1949 and 1954 and a lack of funds for a stepped-up car repair program until well into this year—he said:

"The Great Northern entered the postwar period with the thought in mind that we were going to continue in business for a long time and that we had better improve our services if our intentions were to be carried out. We have made strenuous efforts to get the best possible use out of equipment that is available for our use. We have speeded up our service and are getting a much faster movement, not only on loaded cars but also on empty cars. By doing so we are providing more serviceable car days. We have improved the quality of our cars so that less time is spent by each going to, on or coming from repair tracks. We have increased the cubic capacity and the tonnage capacity of our cars.

"We are not alone in doing these several things. It is a bitter pill for those who have followed such a program to swallow that someone else in some other part of the country is reaping the benefits from the efforts we have made on behalf of our own customers.

"I say again that a change must come."

Car Distribution Irks GN

Roads of Northwest have upheld their share of nation's car supply—"I am old-fashioned enough to feel our customers should benefit from this," Budd tells NW board.

"Some change must be made. What form it will take is hard to predict. But the continuing [car] shortages in our area cannot continue. I can only say that there is no simple solution. When the change comes it will probably be quite radical."

With utmost candor, John M. Budd, president of the Great Northern, dwelt at length on the present freight car shortage while speaking to members of the Northwest Shippers Advisory Board at Minot, N.D., the other day. Acknowledging that the box car situation was paramount in the minds of Northwest board members, he termed the shortage "particularly bad in the Northwest" and having "every indication of getting worse before they get better." He said the Interstate Commerce Commission stepped into the picture when efforts of the Association of American Railroads proved "wholly inadequate"; but added that: "It must be understood that the AAR is not a dictatorship. It is a loose association of privately-owned railroad corporations which acts on behalf of those roads on matters such as standards of car construction, maintenance of cars used in interchange, arrangement for payments between carriers, car service rules and orders, and many other matters of mutual interest.

"To function properly there must be a desire, or at least a willingness, to respect the association's rules and orders," he continued. "Those in the Car Service Division are most persua-

sive when dealing with the individual companies. Their arguments too often fall on deaf ears, however, and a disruption in the distribution of cars results." Appeals to persuade individual carriers to comply with the car service rules and orders have "frequently" been made at the very top executive level, he said, adding: "The shortage which we are now in the midst

Car Buying to Fore on PRR

Vice-President Newell so advises Congressional investigators of "fast amortization" program

The Pennsylvania has "turned the corner in acquiring diesels," and henceforth the "major part" of its expenditures for equipment will be for the purchase of new freight cars.

The road's operating vice-president, J. P. Newell, so advised a subcommittee of the House's Government Operations Committee which is investigating the so-called fast-amortization program, i.e., the plan whereby tax relief is allowed to permit amortization of certified defense facilities over a five-year period. Mr. Newell appeared August 1 at the closing session of a series of hearings held by the subcommittee which is headed by Representative Molohan, Democrat of West Virginia.

At previous sessions, subsequent to those reported in *Railway Age* of July 25, page 7, the subcommittee received presentations from Joel Dean, professor of business economics at Columbia University and head of Joel Dean Associates, economic and management consultants; and from Charles R. Cherington, professor of government at Harvard's Graduate School of Public Administration. Mr. Dean appeared, as he put it, "to be of such assistance as I can in an objective analysis of the question before the committee." Mr. Cherington appeared on behalf of the New Haven with which he is associated as consultant.

Amortization Helped—PRR Vice-

President Newell said the fast-amortization arrangement permitted his road to do more than it otherwise would have been able to do in the way of acquiring new cars. He also said PRR had acquired as many cars as it could on the basis of its financial situation.

Representative Molloyhan noted that the PRR now has 59,000 fewer freight cars than it had at the close of World War II. Mr. Newell explained that the road came out of World War II with a fleet in excess of its traffic needs, though it was in poor condition. He said later on that the PRR would not feel justified in "stockpiling" freight cars.

Before and After—The PRR vice-president said the fast-amortization incentive alone would not produce car orders, but he thought it had the effect of increasing the number ordered. On this point, P. D. Fox, assistant vice-president and treasurer of the PRR, supplied figures showing that 27,878 cars have been ordered during the five years the fast-amortization plan has been in effect. Orders in the previous five years totaled 5,059 cars.

Chairman Molloyhan raised a question as to whether the railroads have complied with the intent of Congress, which, as he understood it, was to provide tax relief not for replacements, but to get "additional" facilities for defense. T. K. Warner, Jr., chief tax counsel of the PRR, took the position that the replacement factor had been taken into account in fixing percentages of expenditures for equipment that would be eligible for fast amortization.

Chairman Molloyhan insisted that the goals set up contemplated adding 194,000 cars to the fleet. In reply, Mr. Warner conceded that the program had "failed" if one of its purposes were to "stockpile" cars. If "stockpiling" were considered necessary, he thought it should be done by the government.

Tighter Controls — In a subsequent discussion of the outlook for fast amortization, Chairman Molloyhan said he didn't think the program would be dropped. He interpreted statements made by Secretary of the Treasury Humphrey and others as indicating the Eisenhower Administration's disposition to go in for closer scrutiny of future applications.

A. R. Seder, vice-president of the Association of American Railroads, who had testified at earlier sessions, was recalled by Chairman Molloyhan to comment on figures showing how applications for write-off certificates rose in July to the point where they reflected plans to acquire 44,644 cars. Applications filed in the five previous months involved only 7,169 cars.

Mr. Seder attributed the increase to the June meeting of AAR member roads, noting that "something was said" there about "agitation for removal of the amortization program." He hadn't "any doubt" that such "agitation" and the subcommittee's hearings were factors in the recent order situation.

Building Capacity — Professor

Dean's statement was designed to show that, during the fast-amortization period, railroads have built much additional capacity into their plants. Periodic freight-car shortages must be expected, he said.

His advice as to how to get a "stockpile" of cars was to have the government buy, at 10% over scrap value, all cars about to be retired. Such cars could then be repaired and stored in "white lead," thus providing, in Professor Dean's opinion, the "cheapest" possible "stockpile."

Professor Cherington said the New Haven wanted fast-amortization continued to aid in financing the new trains which will "revolutionize" its passenger operations. He thought the road would go ahead with its plans even if the tax relief were withdrawn, but he anticipated that it might not then be able to move as fast as it hopes.

FREIGHT CARS

The **Fruit Growers Express Company** has ordered from its company shops at Alexandria, Va., 400 50-ft, 70-ton mechanical refrigerator cars, for delivery beginning in January 1956.

The **Central of Georgia** has ordered 500 50-ft, 9-ft-door box cars from Pullman-Standard, for anticipated delivery in March 1956, at an estimated cost of nearly \$3.5 million. The cars will be painted with the aluminum oval design, on a black background, developed for the 500 box cars which the CofG purchased from Pullman last year.

The **Savannah & Atlanta** has ordered 300 40-ft, wide-door box cars from Pullman-Standard, for anticipated delivery in March 1956, at an estimated cost of \$2 million.

LOCOMOTIVES

The **Louisville & Nashville** has ordered 30 general-purpose diesel locomotive units at a total cost of about \$5 million. Electro-Motive will build 10 1,750-hp units and Alco will build 20 1,600-hp units. Delivery of the former are scheduled to begin around the first of next year; they will go into service in the L&N's main-line locomotive pool between Louisville, Nashville, St. Louis and New Orleans. The Alco units will be delivered in October and November this year for service on the eastern districts of the L&N.

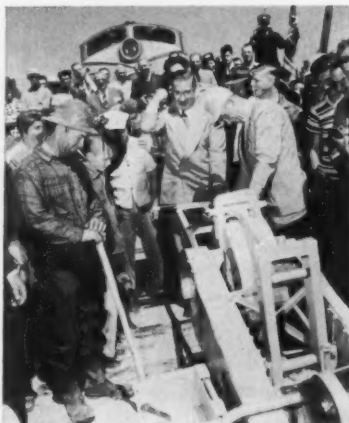
PASSENGER CARS

The **New York City Transit Authority** has ordered 250 subway cars from St. Louis Car Company. The order, which is subject to final approval by the city's Board of Estimate, would call for delivery of the cars early in 1957.

MISCELLANEOUS

The **Great Northern** will install a Univac electronic system for data processing in its general office building in St. Paul. Delivery of the equipment is expected some time next year. It will be obtained from Remington Rand, Inc., on a rental basis.

New Facilities



FORMAL OPENING of the Canadian National's new 24-mile branch between Hillsport, Ont., and the developing Manitouwadge mining area took place July 27, when Donald Gordon, CNR president and chairman, drove the traditional "last spike"—a copper one, in recognition of the mineral which will eventually move over the line.

CNR Opens New Line to Manitouwadge Mining Area

A 24-mile branch line linking the new Geco mine at Lake Manitouwadge, Ont., with the CNR's main line at Hillsport was opened by the Canadian National on July 27.

Establishment of rail service over the new line will make possible the heavy inbound freight movements necessary to open up the Manitouwadge mining area, where ore reserves are estimated at 15 million tons, averaging 1.72% copper, 3.55% zinc, and 1.73% silver. Hydro-electric power for the development will be available in November; erection of a milling plant with an initial output of 3,300 tons per day will begin early in 1956; and the Geco mine itself is scheduled to go into production in the spring of 1957. At that time, outbound movement of concentrates is expected to average from 15 to 20 carloads per day, with inbound freight movement of about 25 cars per month.

Construction of the new line began October 8, 1954, and cost about \$2,500,

000. It required 60,000 cu yd of excavation, and construction of 10 timber trestles and 65 pipe culverts.

Lehigh Valley to Open New Buffalo Terminal

The Lehigh Valley's new \$1,200,000 freight and passenger terminal at Dingens and South Ogden streets, Buffalo, N.Y., will be formally opened August 11.

The new terminal will replace former LV facilities at Scott and Washington streets, except for one team track reserved for handling carload traffic. The old terminal property, plus 3.7 miles of LV right-of-way, have been purchased by the New York State Thruway Authority for use in building a portion of its Niagara Thruway.

The new terminal provides quarters for operating, freight and passenger personnel. Passenger facilities include waiting room, baggage room, restaurant, and storage lockers. Provisions for freight traffic include freight house and team tracks, 40-ton gantry crane, and means for handling trailer-on-flat-car (piggyback) shipments. Parking space for several hundred automobiles is provided at the new site, which the road describes as "readily accessible from all sections of the city."

Canadian National.—Work is expected to start soon on the new line from St. Felicien, Que., to Chibougamau (*Railway Age*, May 17, 1954, page 11). Tenders have been requested for clearing, grading and preliminary work on the first section from St. Felicien to Chigoubiche Lake. The new line will link up at Chibougamau with a western section being built from Beattyville on the CNR transcontinental route (*Railway Age*, November 29, 1954, page 29).

Erie.—Has ordered equipment for installation of a remote control system at OS interlocking, Jersey City, N.J., from the General Railway Signal Company.

Minneapolis & St. Louis.—A million dollars in grain elevator construction and expansion is underway at on-line sites, according to John W. Devins, president. At 12 sites in Minnesota, Iowa and South Dakota aggregate new storage will exceed 1,265,000 bushels, mostly for corn and soybeans. Largest of the new elevators are 250,000-bushel buildings at Badger, Iowa, and Dallas Center. Each will cost \$150,000. At Rockwell, Iowa, an elevator holding 200,000 bushels will replace one which held 30,000 bushels. The new one will cost \$150,000. Construction of the new facilities is not a railroad project.

New Haven.—The mainline bridge over the Saugatuck river at Westport, Conn., will be modernized and repaired at an estimated cost of \$165,000.

Figures of the Week

Six Months Net Up \$184 Million

AAR estimate puts figure at \$416 million—June net climbed almost 50% to \$88 million

Estimated net income for Class I roads for the first six months of 1955, after interest and rentals, was \$416,000,000 compared with \$232,000,000 in the corresponding period for 1954.

The Bureau of Railway Economics, Association of American Railroads, reported estimated net income for June, 1955, after interest and rentals, was \$88,000,000 as against \$60,000,000 in June last year.

Net railway operating income for the half-year, before interest and rentals, was \$526,830,860 as against \$342,337,672 for the same period in 1954. Net railway operating income, before interest and rentals, was \$106,033,546 for June 1955, compared with \$79,059,485 for the same month in 1954.

In the 12 months ended June 1955, the rate of return averaged 3.97% compared with 3.40% for the year ended June 1954.

The AAR reported that due to labor difficulties four roads operating in the Southern Region have been unable to file returns for the month of June. The comparisons in the report, therefore, are exclusive of returns for those roads for the months January through June for both 1954 and 1955.

Gross in June was put at \$875,112,392 compared with the June 1954 gross of \$800,531,768. Gross for the first six months of 1955 came to \$4,820,336,062 compared with \$4,591,252,244 for the same period in 1954, an increase of 5%. Operating expenses for the six months this year amounted to \$3,645,751,965 compared with \$3,683,934,579 in the same period in 1954, a decrease of 1%.

Thirteen Class I roads failed to earn

interest and rentals in the first six months of 1955, of which six were in the Eastern District, two in the Southern region, and five in the Western District.

Freight Car Loadings

Loadings of revenue freight in the week ended July 30 totaled 795,771 cars, the Association of American Railroads announced on August 4. This was an increase of 9,338 cars, or 1.2%, compared with the previous week; an increase of 112,154 cars, or 16.4%, compared with the corresponding week last year; and an increase of 2,017 cars, or 0.3%, compared with the equivalent 1953 week.

Loadings of revenue freight for the week ended July 23 totaled 786,433 cars; the summary, compiled by the Car Service Division, AAR, follows:

REVENUE FREIGHT CAR LOADINGS For the week ended Saturday, July 23			
District	1955	1954	1953
Eastern	134,202	111,964	130,950
Alleghany	135,236	123,668	137,884
Poconchos	64,286	48,621	39,161
Southern	118,482	112,420	118,300
Northwestern	131,539	114,469	135,171
Central Western	123,755	117,481	122,157
Southwestern ..	58,933	55,658	57,076
Total Western Districts	314,227	287,608	314,404
Total All Roads	786,433	684,281	780,699
Commodities:			
Grain and grain products	69,419	63,482	56,137
Livestock	5,394	6,869	6,709
Coal	133,466	106,877	130,696
Coke	12,248	6,939	12,916
Forest Products	47,039	37,663	45,734
Ore	83,714	71,511	96,237
Merchandise l.c.l.	67,360	39,161	65,271
Miscellaneous ..	367,793	331,779	366,999
July 23	786,433	684,281	780,699
July 16	799,040	694,545	791,414
July 9	652,680	569,562	721,454
July 2	696,734	618,559	670,273
June 25	799,472	713,160	818,450

Cumulative total, 29 weeks

In Canada.—Carloadings for the seven-day period ended July 21 totaled 87,861 cars, compared with 87,246 cars for the previous seven-day period, according to the Dominion Bureau of Statistics. The 1955 total includes 4,666 cars loaded by the Quebec North Shore & Labrador.

	Revenue Cars Loaded	Total cars Rec'd from Connections
Totals for Canada:		
July 21, 1955 ..	87,861	30,777
July 21, 1954 ..	78,183	25,785
July 14, 1955 ..	87,246	29,716
July 14, 1954 ..	78,181	24,286
Cumulative Totals:		
July 21, 1955 ..	2,140,107	898,163
July 21, 1954 ..	1,966,689	806,750

CLASS I RAILROADS—UNITED STATES Month of June

	1955	1954
Total operating revenues	\$ 875,112,392	\$ 800,531,768
Total operating expenses	644,882,624	623,158,776
Operating ratio—percent	73.69	77.84
Taxes	101,320,500	76,222,264
Net railway operating income (Earnings before charges)	106,033,546	79,059,485
Net income, after charges (estimated)	88,000,000	60,000,000

Six Months ended June

	1955	1954
Total operating revenues	\$4,820,336,062	\$4,591,252,244
Total operating expenses	3,645,751,965	3,683,934,579
Operating ratio—percent	75.63	80.24
Taxes	521,641,721	440,067,072
Net railway operating income (Earnings before charges)	526,830,860	342,337,672
Net income, after charges (estimated)	416,000,000	232,000,000

Labor & Wages

Board Reports on BLFE 40-Hr Case

Recommends wage increase for yard enginemen converting to 5-day week—Sends carriers' rules demands back to parties for negotiated settlement or arbitration

An emergency board has recommended wage increases ranging from 50 cents to upwards of \$1.63 per day for yard-service enginemen who convert from a 6-day, 48-hour week to a 5-day, 40-hour week. The board's report, which went to President Eisenhower July 30, was made public at the White House August 1.

The recommendation applies to yard-engine employees who are represented by the Brotherhood of Locomotive Firemen & Enginemen, and the board estimated that its adoption would cost the railroads "some \$7 million per year." The BLFE had asked that the conversion raise be increased by \$2.24 per day, i.e., to \$2.56. It is now 4 cents per hour, or 32 cents per day.

Members of the board were Chairman Curtis G. Shake, former justice of the Indiana Supreme Court; Martin P. Catherwood, dean of the New York State School of Industrial and Labor Relations at Cornell University; and G. Allen Dash, labor relations specialist, of Philadelphia.

In addition to the conversion-pay matter, the case involved another BLFE demand for guaranteed minimums of \$18 per day for firemen and \$20 per day for engineers, and the railroads' demand for several changes in working rules. The board recommended that this BLFE demand be withdrawn, and that the rules issue be submitted to arbitration if a settlement could not be reached in further negotiations.

Formula—The board's conversion-pay recommendation is based on a formula which would first increase wage rates in effect September 1, 1948, by 20%, and then deduct 14½ cents per hour (\$1.16 per day), which the board found yard firemen already getting as a "prepayment" on conversion. The resultant "conversion factors" would be substituted for the presently-effective 32 cents per day. They would be applied to future wages of BLFE members who converted on the 32-cent basis, as well as to new conversions.

The new "conversion factors" would range from 82 cents to \$1.07 per day for hostlers; and from 94 cents to upwards of \$1.49 for yard firemen, depending on the weight on drivers of locomotives to which they are assigned. Also on the weight-on-driver basis, the range for yard engineers would be from \$1.27 to upwards of \$1.95.

Most yard locomotives are in the weight-on-driver class of 200,000 to 250,000 lb, and the recommended "conversion factors" there are \$1 for firemen and \$1.39 for engineers. Thus, typical raises above the 32 cents now available would be 68 cents and \$1.07 cents, respectively.

Conversion on the 32-cent basis has been optional, and the option has been exercised by only about 11% of yard engine employees, these being employees of only 15 roads. The board's recommendation includes a stipulation to the effect that the conversion adjustment it proposes be effective only as to crafts for the members of which BLFE "accepts complete conversion."

Dash Notes Exception—As to the latter, a footnote in the report records Board Member Dash's view "that the optional nature of the conversion factor is not a part of the dispute between the parties and, therefore, should not qualify the board's recommendations on the dispute as submitted." Meanwhile, the report had stated the board majority's view as follows:

"The board feels that the employees are entitled to a 5-day work week if they want it. . . . But it is clear that if the proposed increased in wage rates on conversion were made available on an optional basis and were accepted only by limited groups of the membership of BLFE, a dual wage system would exist with much wider differences in wages than under the present dual system with a 4-cents-per-hour differential.

"Employee groups, choosing for reasons of their own to remain on a flexible 6-day or 7-day basis would undoubtedly urge that their services for the first five days in any week, as well as the sixth or seventh day at work, are as valuable as those of members of the same craft, or of other crafts on a 5-day week. Forces might be set in motion in the direction of eliminating the 'discrepancy' and the results might well be a higher level of wages but without the 5-day week which would be indefinitely postponed for the craft concerned. If a higher level of wages is the real issue in the present controversy, the board feels that the issue should be handled as such and not in the guise of the 5-day week."

"Non-Op Pattern"—The board's formula for determining the "conversion factors" reflects its undertaking to give yard enginemen treatment equal to that accorded non-operating employees when they converted to the 40-hour week. That conversion was accompanied by a 20% wage increase, which was the basis of the 20% factor in the present board's formula. The 14½ cents reduction, or "prepayment" factor, was based on the board's determination that, since the non-op conversion in 1949, yard enginemen have



PIGGYBACK WITH FLATBED TRAILERS was the transportation medium selected by R. Hoe & Co. to ship four 20-ton color convertible newspaper presses from New York to Cleveland for the Cleveland Press. The whole movement, involving 12 separate shipments, was handled by the Lackawanna and the Nickel Plate. Shown

here, in the Lackawanna's Hoboken yard prior to departure of one of the first shipments, are: Pete Turnbull, Hoe traffic manager (left); J. L. Barngrove, Jr., general traffic manager for the Lackawanna (center); and R. A. Cook, manager, traffic department, American Newspaper Publishers Association.

received that amount in lieu of the five-day week or in settlement of previous 5-day-week demands.

This determination was supported by figures showing that yardmen got 23 cents an hour in October 1950, when road operating employees got only 5 cents. In January 1951, however, roadmen got another 5 cents while yardmen got only 2 cents; and the March 1951 increases were 2.5 cents and 2 cents, respectively. The board concluded that the difference between the 27 cents which yardmen got in this period and the 12½ cents which roadmen got "was actually . . . granted to facilitate the conversion of yard operating employees to the 40-hour week. This 14½ cents per hour has been paid to all yard operating employees whether they have been on 5-day, 6-day or 7-day weeks, but its reason for existence has been as a payment to offset part of the impact of lost wages in the conversion from a 48-hour to a 40-hour work week."

Not Rewriting History—"In its appraisal of wage developments in the railroad industry during the past seven years and in reaching its computations and conclusions," the report also said, "the board has not sought to rewrite history but to understand it. It has no illusion that it can unravel with certainty and in complete equity and in a very limited time the complex with which it has been faced. It believes its conclusions and the recommendations which are based on them are as equitable as can be reached in comparing the conversion of yard service engine employees with the conversion of the non-operating employees."

In another place, the report suggested that the board might well be weaving a pattern for conversion of other operating groups whose 5-day-week demands are still alive, having been held over from previous wage-case settlements for "further handling."

The report said: "It is expected that the 'further handling' will be patterned after the affirmative results, if any, of the negotiations between the BLFE and the carriers arising out of the recommendations of this emergency board."

The rules issues involved railroad demands for changes that would permit abolition of yard crew assignments, revision of procedures for handling interchange cars, elimination of engine-men on self-propelled machines, and elimination of hostlers and yard-service employees in the handling of light engines in yards.

Aside from contending that the filing of the rules demand did not meet technical requirements of the Railway Labor Act, the BLFE did not participate in the rules phase of the board's proceedings. This refusal to meet the issue on the merits made the board's task "a most difficult one," the report said; but it hastened to add that this statement was not intended as a reflection on BLFE or its counsel who

"had a right to handle the presentation of their case as they saw fit."

The report went on to suggest that some future board, confronted with a like situation, might treat the carriers' showing as "unchallenged" and thus grant the rules demands. "This," the report added "would not create a wholesome situation and we shall refrain from taking such a drastic step."

Reform Needed—The board was nevertheless "much impressed with the thought that there is need for reform in the areas upon which the carriers' proposals would operate if they were adopted." Its difficulty was its inability to determine "whether the precise rules that have been proposed are best calculated to accomplish the objectives to be desired."

The difficulty was resolved by the board's conclusion that "such problems could best be solved around the conference table." Thus the recommendation for "further negotiations," or arbitration, which the board made "at the risk of being charged with having side-stepped its responsibility" in the rules phase of the case.

Board Favors Benefits, Raises for REA Employees

A Presidential emergency board has recommended that the Railway Express Agency grant pay raises of 11 cents an hour to employees in New York City and eight cents an hour to employees in seven other large cities. The board also recommended extension of a health and welfare plan now available to New York City employees to those in the other cities.

The emergency board, appointed by President Eisenhower July 1 following a strike vote (*Railway Age*, July 11, page 10) rejected all other demands of the International Brotherhood of Teamsters, representing the employees in all eight cities.

The board, comprised of Robert G. Simmons, chairman, Morrison Handaker and Benjamin C. Roberts, submitted its report on the labor dispute to the White House July 30. Two disputes are actually involved, one concerning REA employees in the New York metropolitan area; the other affecting agency employees at Chicago, Cincinnati, Cleveland, Newark, Philadelphia, St. Louis and San Francisco.

Recommendations—The board recommended a basic eight-cent raise for all these employees, making it retroactive to January 1 for those in New York and to January 24 for those in the other cities. It also urged extending to the employees in the other cities a health and welfare plan which has been in effect in New York since 1950. The plan would be financed by payments of \$1 a month by employees, and by agency contributions equivalent to three cents an hour.

The board went on to recommend that in both New York and the other cities, the plan be administered jointly

Briefly . . .

. . . 125th anniversary of the "Tom Thumb," first steam locomotive in the United States, will be the subject of three cachets to be issued August 28 by the Chicago Philatelic Society. The cachets may be ordered from the society (10 South Clark Street, Chicago 2), for 50c a set, which includes envelopes, postage, addressing, servicing and mailing on the anniversary date.

through a board of trustees comprised of two company and two union representatives and a fifth member to be named by them.

The board also recommended that, in order to "balance the extension of the health and welfare plan" to employees in the other cities, an additional three cents an hour be paid to employees in New York City, making their total raise 11 cents an hour. However, the three cents would not be paid until the welfare plan is extended to the other cities.

Dissenting Opinion—Chairman Simmons dissented on the granting of the three extra cents to the New York employees. He said the basic eight-cent increase was intended to adjust the eight-cent wage advantage of REA employees represented by the Brotherhood of Railway Clerks who won raises in 1954. The extra three-cent grant upsets this parity once more, he held, and "creates a new dispute and gives impetus to the inflation cycle of wage increases."

Operations

Four Railroads Expand Piggyback Services

Extension of trailer-on-flat-car freight service has been announced by the Baltimore & Ohio, the Canadian National, the Canadian Pacific and the Santa Fe.

The B&O has added the Wheeling, W. Va., area (including Moundsville, W. Va., and Bellaire, Ohio, Bridgeport and Martins Ferry) to the points covered by its "TOFCEE" service; has established a new service between Pittsburgh and Indianapolis; and provided additional services between Toledo, on the one hand, and Philadelphia, Baltimore, Washington, Pittsburgh and East St. Louis-St. Louis, on the other. The Wheeling district—the 11th area covered by "TOFCEE"—will have services to and from Philadelphia, Baltimore, Washington, Cincinnati, Louisville, Indianapolis, East St. Louis-St. Louis, Toledo and Chicago.

The two Canadian roads have expanded their Montreal-Toronto piggy-

back service to include London, Ont., and have liberalized some of the tariff provisions relating to weights and commodities handled and number of deliveries provided.

The Santa Fe has begun trailer-on-flat-car service between California, Arizona and New Mexico points eastward to El Paso, Tex. Truckload and merchandise traffic in a wide range of commodities is being handled under rates competitive with those of highway carriers. Intention to provide this service was announced in May (*Railway Age*, May 30, page 13), at the time the Santa Fe announced participation in "Bieber Route" joint service to the Pacific Northwest in connection with the Western Pacific and the Great Northern.

Rates & Fares

Roads Hit Critics of Ex Parte 175 Petition

Countering objections to their plea to make the Ex Parte 175 increases permanent, the railroads assailed a lack of concern for how loss of the increases would affect the roads. This position highlighted the railroad rebuttal statements filed with the Interstate Commerce Commission Aug. 1.

There was no attempt in the 23 separate statements to answer each of the many objections filed since the

railroads introduced their plea (*Railway Age*, April 25, page 7). Several protests were dismissed as "argumentative" and drew no replies. Others, as from coal industry representatives, were treated together in one or more statements.

The rate increases, applied in the form of surcharges amounting to a 15% general advance with some exceptions, including coal, are scheduled to expire December 31. The railroads have asked that this expiration date be cancelled and that the increases be made a permanent part of the rate structure.

The ICC, responding to the railroad plea and objections to it from many sources, announced that it would accept written testimony pro and con preliminary to oral argument before the whole commission. It also provided for cross-examination of witnesses if desired before Division 2 (*Railway Age*, May 23, page 8).

"The issue in this proceeding," Graham E. Getty, assistant vice president, Association of American Railroads, declared in one statement, "is the effect that withdrawal of Ex Parte 175 surcharges would have on the railroads." But, he stated, although none of the objectors denied this "not one attempts to show what the situation would be without the surcharges."

Mr. Getty went on to reply to the objections of the coal interests, stating that "the coal industry has enjoyed in the postwar period to date far greater profits than has the railroad industry." He said further that coal industry spokesmen have "overstated" the bur-

den the passenger deficit places on freight earnings.

This argument was picked up in a statement by J. L. Heywood, assistant comptroller, Pennsylvania, who declared that "as compared with carload freight traffic in general, bituminous coal falls very far short of making a proportionate contribution to overhead and comes nowhere near bearing any part of the passenger and lcl deficits."

Roy S. Kern, chairman of the Coal, Coke and Iron Ore Committee of the Central Territory Railroads, also attacked the coal position, disputing allegations that railroad rates were accountable for declines in bituminous production.

Among the other statements, replies were made to representatives of the following industries and producers: newsprint, non-ferrous metals, clay pipe and tile, structural clay products, fertilizer, fruits and vegetables, limestone, crushed stone, sand and gravel, lumber, and agricultural limestone.

People in the News

Senate Confirms Hall For Loco. Inspection Post

Rejecting the adverse report of its Committee on Interstate Commerce, the Senate on July 29 confirmed President Eisenhower's appointment of John A. Hall as director of locomotive inspection at the Interstate Commerce Commission. The vote was 43 to 41.

A former special assistant to the grand chief engineer of the Brotherhood of Locomotive Engineers, Mr. Hall has been serving in the ICC position since last October on the basis of an interim appointment (*Railway Age*, July 25, page 13).

Healy Appointed To Retirement Board

Thomas M. Healy, Atlanta district manager for the Car Service Division, Association of American Railroads is slated to succeed Frank C. Squire as railroad management's representative on the Railroad Retirement Board, but his nomination was not confirmed by the Senate before Congress adjourned August 2.

President Eisenhower submitted the nomination on July 30. Presumably, Mr. Healy will now get an interim appointment.

The term for which he was nominated is for the remainder of Mr. Squire's term which expires August 28, 1958. Mr. Squire, who reached the age of 70 on May 16, has submitted his resignation to the President. He has been a member of RRB since 1943.

(More News on page 58)



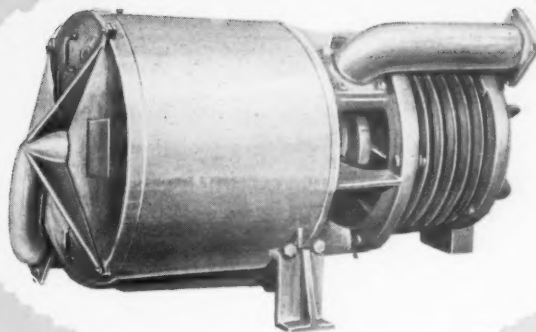
COMPLETING STEP ONE in the plan to remodel its Chicago passenger terminal (*Railway Age*, May 17, 1954, page 12), the Chicago & North Western has opened this new train floor ticket office and information center. The ticket counter, of glass, walnut formica and stainless steel, has windows for 16 ticket sellers who issue most tickets on 10 Burroughs "Ticketeer" ticket printing machines. Fitted into the existing structure, the

new office covers an area that formerly housed an entrance stairway facing Madison street. The former ticket office on the ground floor, along with other facilities on that level, will be converted into a shopping center. Escalators at the Canal street entrance will replace the old stairway there. Eventually the air-conditioned office also will house the North Western's reservation bureau and a telephone center.

The new Seprifuge*

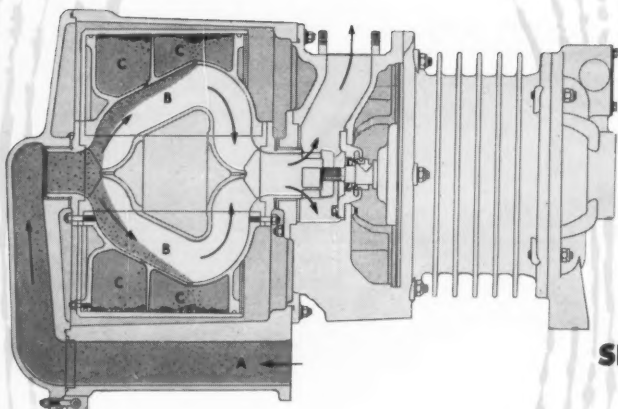
100% full-flow oil cleaning unit

now available for
all ac-equipped
Diesel locomotives



saves as much as \$21.12 on each filter change—an annual return of as much as 42% on investment

Tests on locomotive engines show that the Seprifuge has run for as much as two months without requiring cleaning, as compared with changing present-type filters on an average of every fifteen days. Cost of filter elements is saved and the disposal problem is eliminated. The Seprifuge is simple in design with only one moving part. It is easy to maintain, easy to clean with Electro-Motive's centrifugal-type impeller cleaner specially developed for the purpose. For full information, write us or contact your nearest Electro-Motive Representative. *Seprifuge—Patent applied for



Oil to be cleaned is pumped under pressure into the inlet of the Seprifuge (A) and is channeled into 12 compartments in the spinning rotor (B) which has a top speed of 3245 r.p.m. Centrifugal force separates dirt particles, heavier than oil, by forcing them to the outside of the impeller. All abrasive particles larger than the minimum oil film thickness, which lubricates moving engine parts, pass through slots in the side wall into collection chambers (C).

SEPRIFUGE...traps the dirt as it spins the oil

- Protects engine by whirling dirt and harmful abrasives, which cause engine wear, out of the lubricating oil
- Eliminates lube oil filters—saves tremendous oil losses
- Reduces down-time formerly required to change filters—cuts maintenance costs substantially
- Cleans 265 gallons of oil per minute at top speed—even with locomotive engine at idle, it cleans 80 gallons per minute
- Does not deplete the additive content of the oil

ELECTRO-MOTIVE DIVISION • GENERAL MOTORS

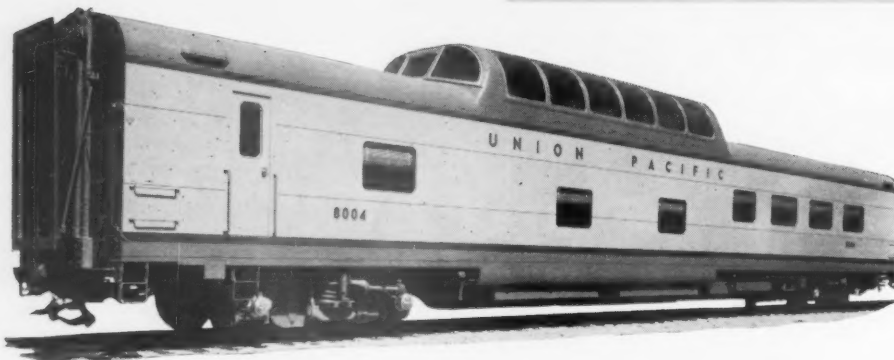
La Grange, Illinois • Home of the Diesel Locomotive • In Canada: GENERAL MOTORS DIESEL, LTD., London, Ontario

GENERAL MOTORS
LOCOMOTIVES

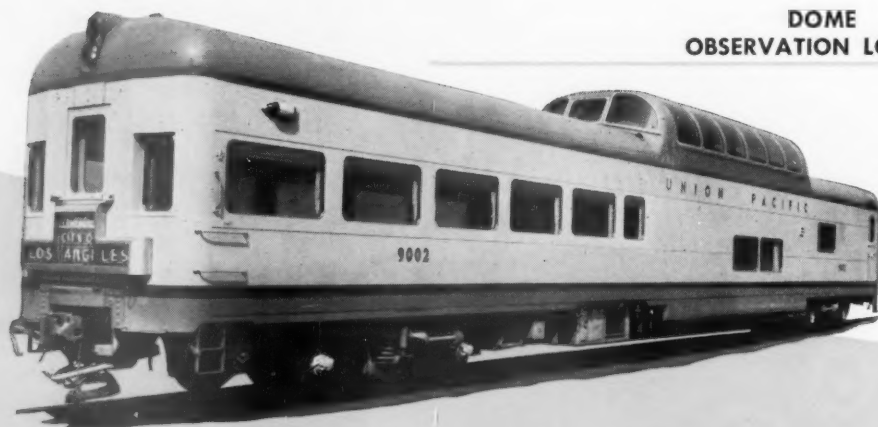
New, *Luxurious* Astra-Dome Cars
all equipped with
Commonwealth



DOME COACH



DOME DINER



DOME
OBSERVATION LOUNGE

Built by ACF
Industries, Inc.,
St. Charles, Mo., Plant

GENERAL STEEL

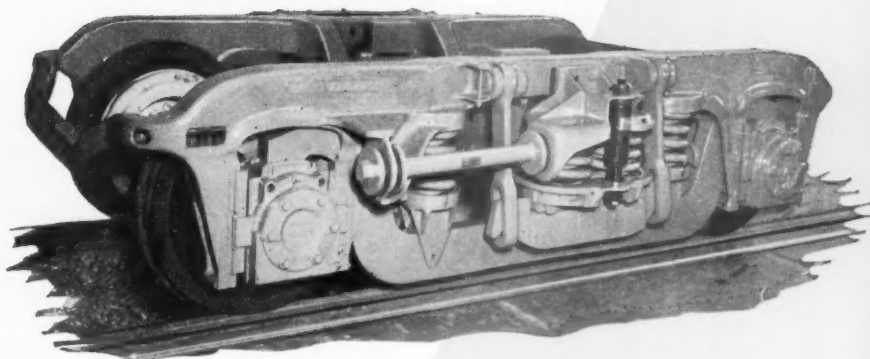
for the **UNION PACIFIC** *Domeliners*

Outside Swing Hanger Type Trucks **and Underframe End Castings**

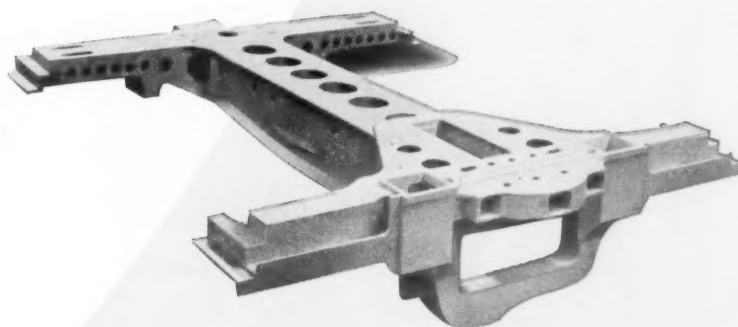
To assure maximum riding comfort, new Domeliner trains on the Union Pacific Railroad feature Commonwealth *Outside Swing Hanger Trucks with Central Bearings*. These latest type trucks not only provide smooth riding but simplify inspection and greatly reduce maintenance expense.

Strong, Commonwealth one-piece cast steel *Underframe End Castings* with integral body bolsters and end sills provide exceptional strength and passenger safety, and eliminate maintenance.

Passenger traffic is attracted by the most modern equipment. For your new cars, specify these Commonwealth Products.



Outside Swing Hanger Truck with Central Bearing



One-Piece Underframe End Casting



CASTINGS

GRANITE CITY, ILLINOIS
EDDYSTONE, PA.

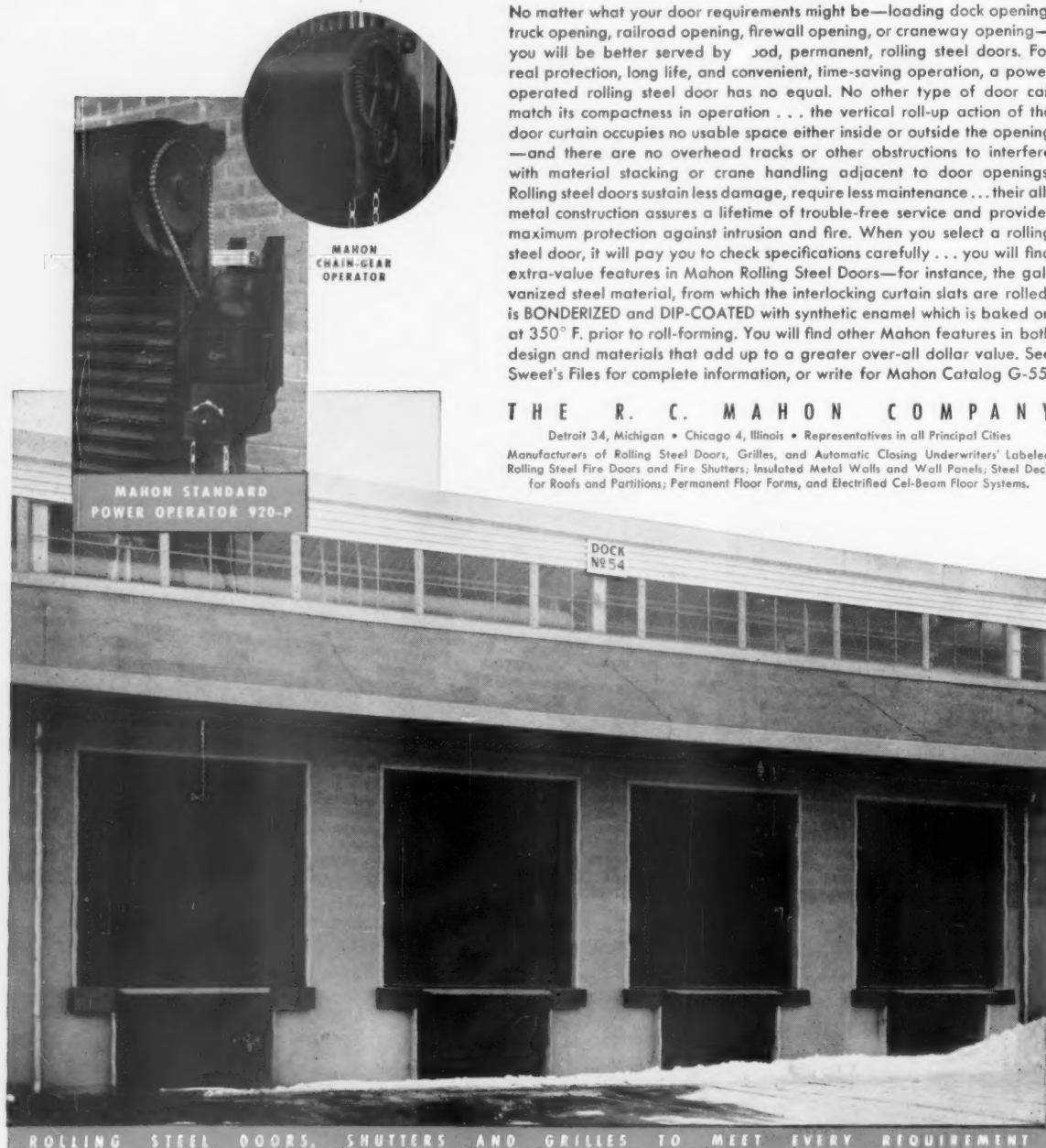
Rolling Steel Doors

Manually, Mechanically, or Electrically Operated

No matter what your door requirements might be—loading dock opening, truck opening, railroad opening, firewall opening, or craneway opening—you will be better served by good, permanent, rolling steel doors. For real protection, long life, and convenient, time-saving operation, a power operated rolling steel door has no equal. No other type of door can match its compactness in operation . . . the vertical roll-up action of the door curtain occupies no usable space either inside or outside the opening—and there are no overhead tracks or other obstructions to interfere with material stacking or crane handling adjacent to door openings. Rolling steel doors sustain less damage, require less maintenance . . . their all-metal construction assures a lifetime of trouble-free service and provides maximum protection against intrusion and fire. When you select a rolling steel door, it will pay you to check specifications carefully . . . you will find extra-value features in Mahon Rolling Steel Doors—for instance, the galvanized steel material, from which the interlocking curtain slats are rolled, is BONDERIZED and DIP-COATED with synthetic enamel which is baked on at 350° F. prior to roll-forming. You will find other Mahon features in both design and materials that add up to a greater over-all dollar value. See Sweet's Files for complete information, or write for Mahon Catalog G-55.

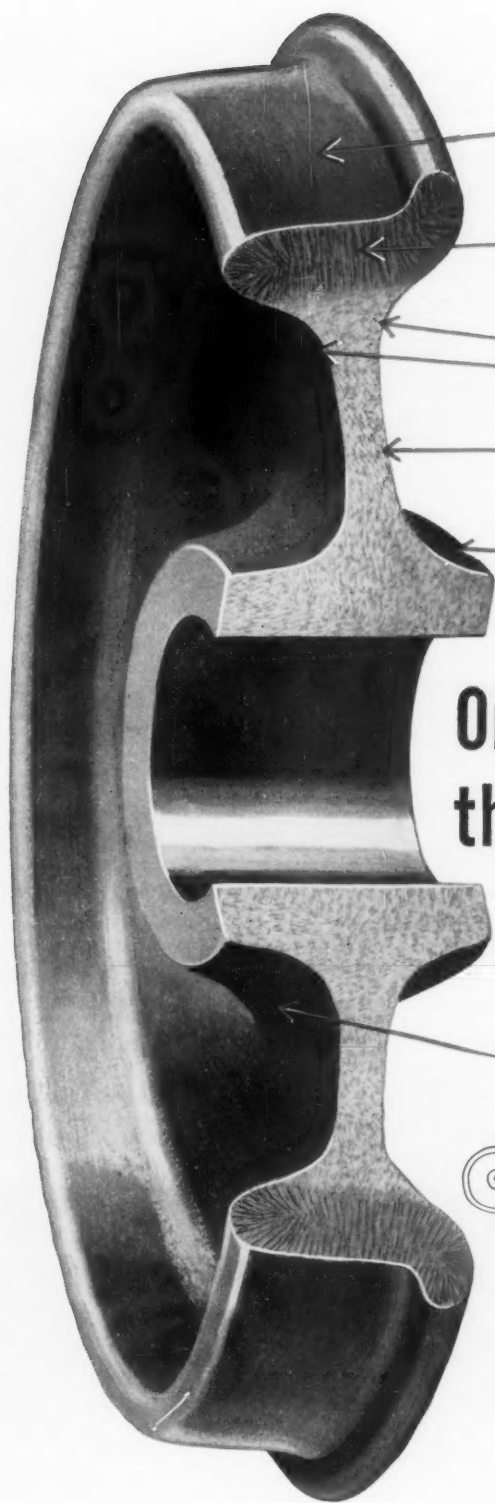
THE R. C. MAHON COMPANY

Detroit 34, Michigan • Chicago 4, Illinois • Representatives in all Principal Cities
Manufacturers of Rolling Steel Doors, Grilles, and Automatic Closing Underwriters' Labeled Rolling Steel Fire Doors and Fire Shutters; Insulated Metal Walls and Wall Panels; Steel Deck for Roofs and Partitions; Permanent Floor Forms, and Electrified Col-Beam Floor Systems.



Four Mahon Power Operated Rolling Steel Doors installed in a loading dock with mechanical floor levelers in each opening. A total of thirty-nine Mahon Rolling Steel Doors were installed in various types of openings in this new Sutherland Paper Co. Plant, Kalamazoo, Mich. Miller-Davis Co., Designers and Gen. Contrs.

MAHON



Roundness of EQS wheel is practically perfect—as-cast. No machining necessary... the toughest and longest-wearing metal is *on the tread, NOT in the scrap bin.*

Pressure pouring in graphite molds results in superior flange and tread wear. Note the directional solidification in flange and tread, shown before heat treatment: *the grain of the metal in EQS wheels is at right angles to the point of wear.*

Long sweeping fillets under flange and rim of EQS wheels insure greatest possible strength.

The Griffin EQS plate is of *uniform thickness*, dimensionally accurate in any section.

Now made of .75 carbon steel. Exclusive casting process used in producing EQS wheels permits use of recognized steel analysis that will best meet your requirements.

Only one wheel can pass
this test with a score of

← **100** →

Location of hub and plate is identical in all EQS wheels; dissipation of heat is even, without developing internal stress.



GRIFFIN EQS
ELECTRIC QUALITY STEEL

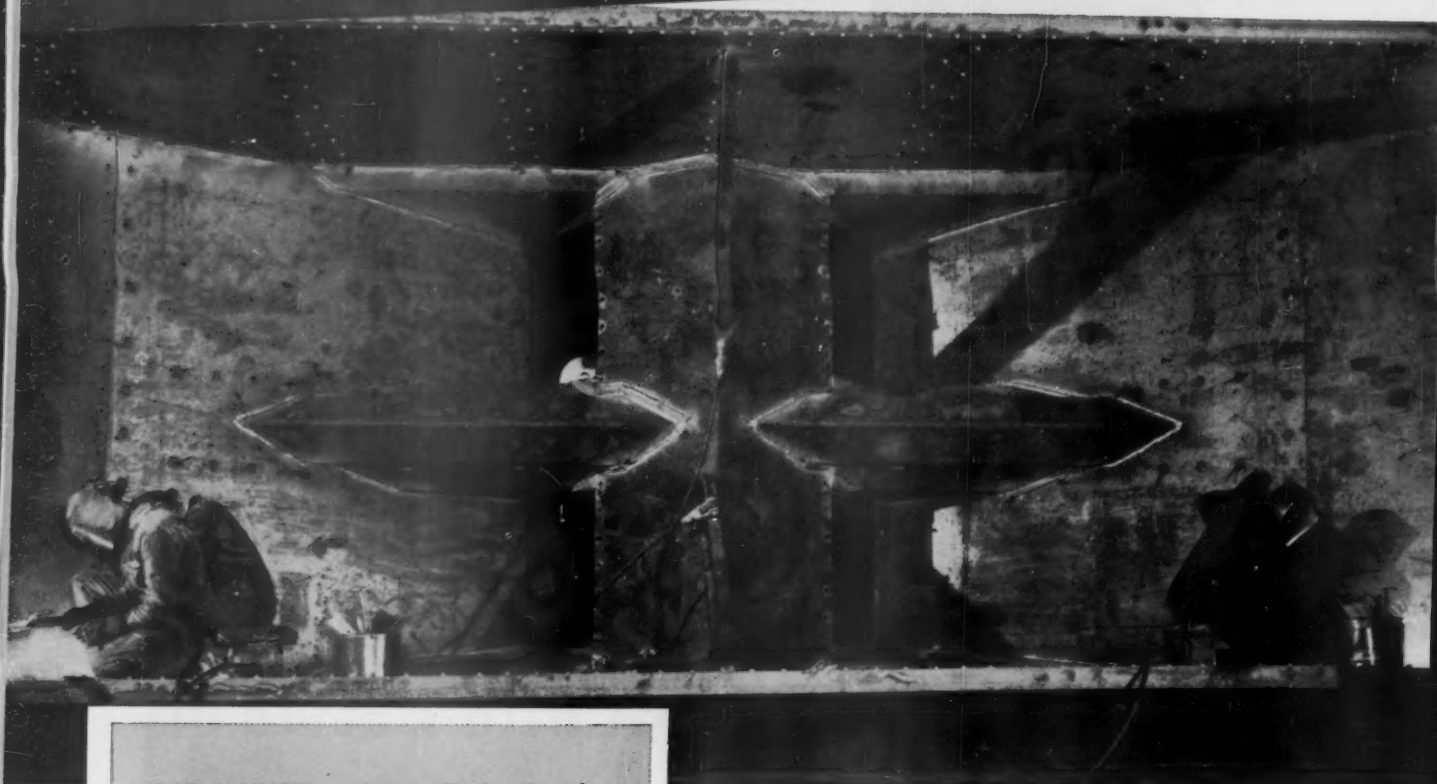
GRIFFIN WHEEL COMPANY
445 N. Sacramento Blvd., Chicago 12
GRIFFIN STEEL FOUNDRIES LTD.
St. Hyacinthe, Quebec, Canada

Give the "green" to GRIFFIN...
and watch your costs go down!





By reducing corrosion damage in hopper cars



NOW AVAILABLE . . . Our new "Design Manual for High Strength Steels" is ready for distribution. This excellent book contains comprehensive and practical information that you will find extremely useful in designing your product for greater economy and efficiency by the sound use of high strength steels.

For your free copy, write on your company letter-head giving your title or department, to United States Steel Corporation, Room 4791, 525 William Penn Place, Pittsburgh 30, Pennsylvania.

TO SAVE \$570,500 IN MAINTENANCE COSTS USS Cor-Ten Steel plates are used throughout in the 652 Virginian 55-ton hopper cars being rebuilt this year. The use of Cor-Ten Steel—which has 50% higher yield point than copper steel and 2 to 3 times the resistance to atmospheric corrosion—means that no heavy repairs will be needed on these cars for 20 years. In contrast, copper steel construction would require at least one, and possibly two, heavy repairs during that time. Thus, by using USS Cor-Ten Steel plates, at an added cost of only \$275 per car, a clear savings in maintenance cost of \$875 per car can be confidently expected.

In addition, since the cars built of USS Cor-Ten Steel need be repaired only once in their lifetime as compared with two trips to the shops by copper steel cars, the revenue made available by having their cars in serviceable condition can be translated into profits for the Virginian.

VGN
26927



VIRGINIAN

VG



COR-TEN Steel construction can pay off big

To reduce maintenance costs and increase service life...

Virginian Railway has made USS COR-TEN Steel a vital part of its car building and rehabilitation program

AFTER TAKING A HARD LOOK at the steadily rising cost of freight car maintenance, the Virginian Railway in 1947 launched a program designed to minimize such costs by using car construction that would increase time between shopping periods.

As a result, The Virginian in the past eight years has used USS Cor-Ten Steel in 4872 open-top freight cars and, as part of a continuing program, is at present rebuilding 652 55-ton hopper cars in its own shops with this superior high strength steel.

This important coal carrier chose USS Cor-Ten Steel because extensive tests and available records showed the service life of hopper car plates of USS Cor-Ten Steel to be 50% to 100%

greater than open hearth copper steel. So the Virginian figured that by using COR-TEN Steel in rather large quantities, they could also save money in rather large quantities, in spite of the slightly higher cost of Cor-Ten Steel construction.

Here's how Mr. L. W. Doggett, Mechanical Engineer of the Virginian, puts it. "Our present practice when building new hopper cars or making heavy repairs for the first time to existing cars is to make all plates of USS COR-TEN Steel with the sides $\frac{1}{4}$ " thick, upper floor sheets and ends $\frac{5}{16}$ " thick, and all other plates, including door plates, $\frac{3}{8}$ " thick. With this construction, we feel that such cars can be kept in regular service twenty years or more

before making heavy repairs, after which four years can be added by patching."

The attached table is worth your careful study. It shows how USS Cor-Ten Steel construction pays off—at a ratio of more than 3 to 1—in reducing maintenance costs in Virginian Railway 55-ton hopper cars. It is on the basis of such demonstrated greater economy in service that USS Cor-Ten Steel has been used in more than 46,000 hopper cars and 32,000 gondolas. Proved economic advantages are the reasons why more than 195,000 freight cars have been built better with USS Cor-Ten Steel since 1933. Would you like us to figure how much you could save with such construction?

**TYPICAL COST COMPARISON FOR 1000 55-TON HOPPER CARS
USING USS COR-TEN STEEL OR COPPER STEEL BODY CONSTRUCTION**

CONSTRUCTION COST of 1000 CARS	Cost of heavy repairs* after 12 years at \$1150 per car	Cost of heavy repairs* after 20 years at \$1425 per car	Cost of heavy repairs* after 24 years at \$1150 per car	Total cost of heavy repairs
COPPER STEEL at \$5,000 per car \$5,000,000	\$1,150,000	\$1,150,000	\$2,300,000
USS COR-TEN Steel at \$5,275 per car \$5,275,000	\$1,425,000	\$1,425,000
Additional Cost of USS COR-TEN Steel....\$275,000 Per car....\$ 275				
Total Repair Saving by USS COR-TEN Steel\$ 875,000				

*Of plates only



UNITED STATES STEEL CORPORATION, PITTSBURGH • AMERICAN STEEL & WIRE DIVISION, CLEVELAND • COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO
NATIONAL TUBE DIVISION, PITTSBURGH • TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA. • UNITED STATES STEEL SUPPLY DIVISION, WAREHOUSE DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

U N I T E D S T A T E S S T E E L

FACTS ABOUT **Exide**[®]

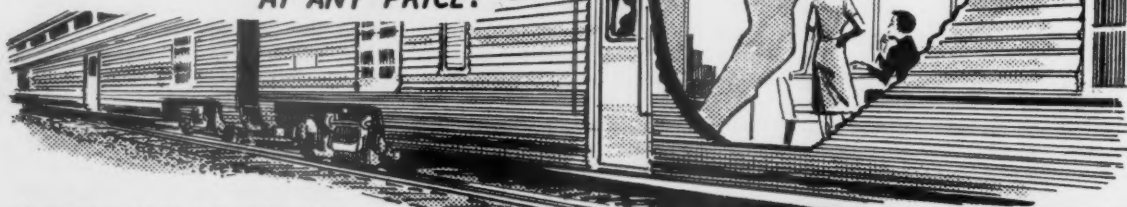
IRONCLAD[®] CAR LIGHTING AND AIR CONDITIONING BATTERIES

HIGH-LEVEL STRATEGY

KEEPS MORE PASSENGERS COMFORTABLE-AND COOL!

FOR NEW HIGH-REVENUE PRODUCERS LIKE THIS BUDD-BUILT SANTA FE 85-PASSENGER CHAIR CAR, EXIDE RESEARCH HAS DEVELOPED A NEW HIGH-CAPACITY CAR LIGHTING AND AIR CONDITIONING BATTERY-THE EH EXIDE-IRONCLAD! NEW ALLOYS, NEW PLASTICS, NEW BATTERY ENGINEERING GIVE YOU FULL RATED POWER INITIALLY- FULL RATED POWER FOR A LONGER WORKING LIFE. IRONCLADS COST LESS TO OWN, OPERATE AND MAINTAIN- THEY ARE YOUR BEST POWER BUY-

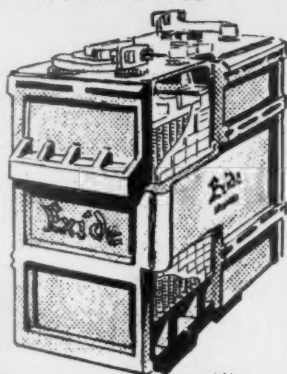
AT ANY PRICE!



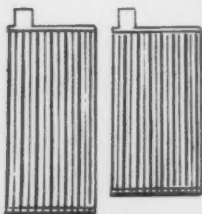
INTRODUCING... THE NEW EH EXIDE-IRONCLAD!

TO SET A NEW STANDARD FOR RAILWAY PERFORMANCE, EXIDE INTRODUCES AN ALL-NEW ENGINEERED AND FIELD-TESTED CAR LIGHTING AND AIR CONDITIONING BATTERY. THE NEW EH—

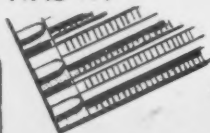
- DELIVERS 100% CAPACITY INITIALLY!
- ITS UNIFORM QUALITY ASSURES SUSTAINED HIGH CAPACITY DURING LONGER USEFUL LIFE!



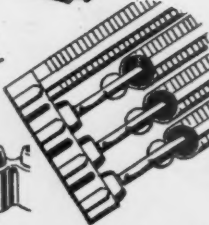
THE NEW EH HAS...



10% LONGER PLATES IN THE SAME PLACE YOU GET MORE POWER FOR A LONGER TIME!



POLYETHYLENE SLOTTED TUBES, AND SEALERS NON-OXIDIZING PLASTIC GIVES LONGER LIFE... PREVENTS SHORTS,



GRIDS WITH SILVIUM THIS NEW EXIDE NON-CORROSIVE ALLOY GIVES HIGH SUSTAINED POWER...LONGER LIFE!

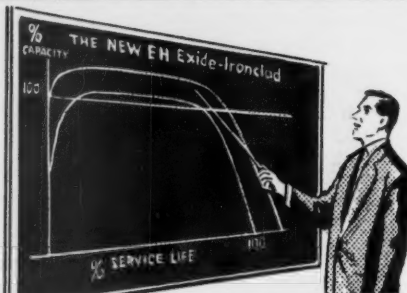


CHART TALK SHOWS HOW EH HIGH CAPACITY MEANS LONGER LIFE!

THE NEW EH STARTS OFF STRONGER...DELIVERS 100% CAPACITY INITIALLY. SEE HOW THIS HIGH CAPACITY IS SUSTAINED DURING A LONGER USEFUL SERVICE LIFE. AN IRONCLAD'S SUPERIOR WORRY-FREE PERFORMANCE MEANS BRIGHT LIGHTS EVEN DURING LONG STOPS...UTMOST DEPENDABLE OPERATION OF AIR CONDITIONING EQUIPMENT...WITH THE LOWEST POSSIBLE OVERALL COSTS!

WRITE

NOW, CALL YOUR EXIDE SALES OFFICE FOR SPECIFICATIONS OF THE NEW EH. TEST IT YOURSELF, YOU'LL FIND THE NEW EH EXIDE-IRONCLAD IS YOUR BEST POWER BUY -AT ANY PRICE!

Exide INDUSTRIAL DIVISION. The Electric Storage Battery Company, Philadelphia 2, Pa.

Avoid pull-aparts

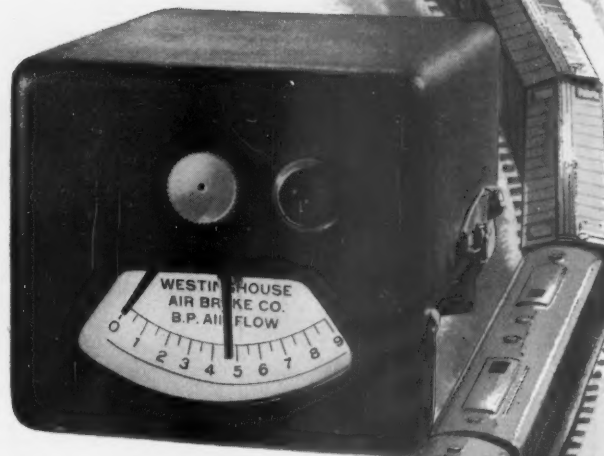
**detect train breakaway,
pipe leakage,
rear-end brake applications.**

● Now you can prevent costly train operating delays with the Westinghouse Air Brake Company Brake Pipe Flow Indicator.

This money-saving device does more than measure brake pipe pressure, it measures the *volume* of air flowing from feed valve to brake pipe. Take, for example, a rear-end pressure drop that would not be immediately noticeable on the pressure gage. The Brake Pipe Flow Indicator instantly senses the increased flow of air and warns the engineman.

It works the other way around, too. The engineman knows when the train is fully charged and ready to go, thus eliminating pull-aparts due to unreleased rear-end brakes. When adjusting feed valve to higher pressure preparatory to descending grades, the engineman can easily tell when he has reached the new pressure. The flow indicator also shows whether brake pipe pressure is being properly recharged during each braking cycle.

The Westinghouse Brake Pipe Flow indicator is ruggedly built to withstand the most severe pressure fluctuations. It is available for operation on either 32 or 64 volts. Write today for our free booklet that describes this time-saving protective device.



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AIR BRAKE DIVISION



WILMERDING, PA.

Now AAR alternate standard A combination of maximum

Spring-mounted guard arm design
eliminates normal running slack and
provides vertical safety interlock.

Resilient knuckle faces
provide additional slack-
absorption when couplers
are in extreme buff position.



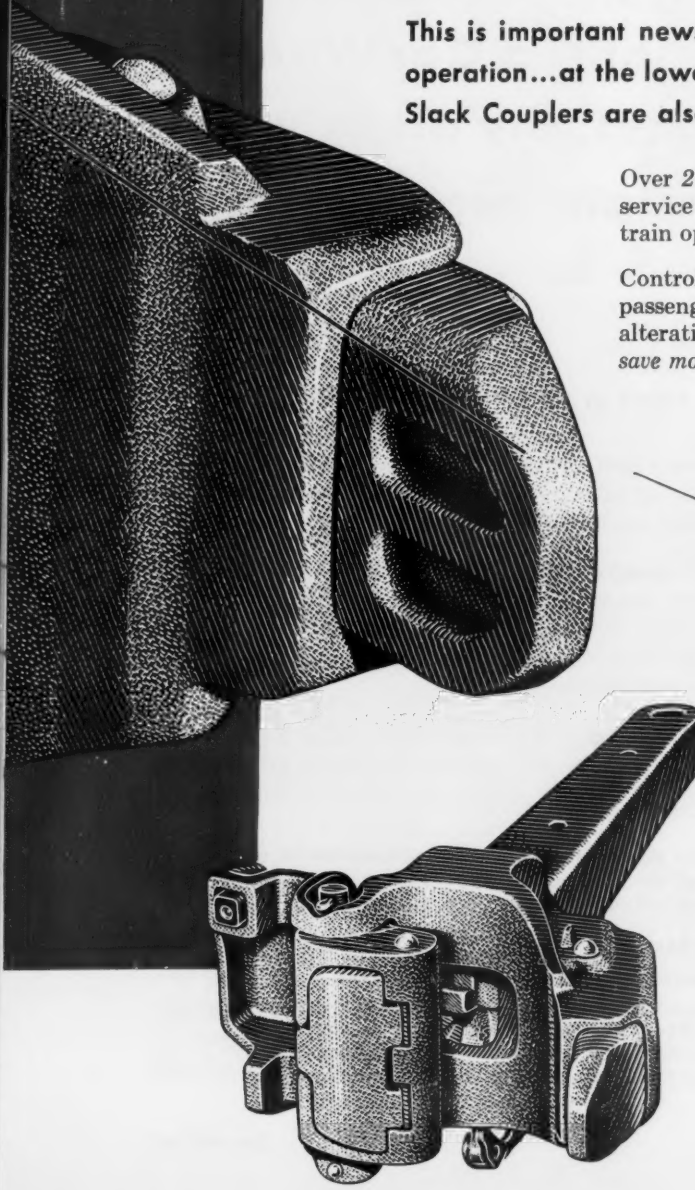
safety at minimum cost... the Controlled Slack Coupler

Fully meets all AAR test specifications

This is important news for the railroad interested in safe, smooth coupler operation...at the lowest possible costs for new passenger cars. Controlled-Slack Couplers are also an ideal application for modernizing existing cars.

Over 2 billion car and locomotive miles of high-speed passenger train service have provided an excellent record of safety, comfort and smooth train operation.

Controlled-Slack Couplers and Slack Free Yokes can be applied to all passenger cars with standard sill spacing, without need for center sill alterations. *Here's a coupler that offers you a safe, practical way to save money.*



ASF

type E controlled-slack coupler

A contribution to railroad operating economy—through
the Research and Development of

AMERICAN STEEL FOUNDRIES

410 North Michigan Avenue, Chicago 11, Ill.

Canadian Sales: International Equipment Co., Ltd.,
Montreal 1, Quebec



**when you weigh
the Chilled Car Wheel
against any other wheel
in freight car service**

give weight to the factors that count most with you

economy AMCCW chilled car wheels are low in first cost, high in exchange value, require little or no "foreign line" freight charges, permit smaller inventories.

performance AMCCW chilled car wheels have a better over-all safety record than any other wheel in freight car service, according to ICC records. The outstanding performance of the *new* AMCCW wheel has improved the chilled wheel safety record every year since it was introduced in 1950.

accessibility AMCCW chilled car wheels are made in 24 plants coast to coast; they are quickly accessible to every railroad.

Low first cost • Short-haul delivery • Reduced inventory • Available locally
Low exchange cost • Increased ton mileage • High safety standards
AMCCW plant inspection • Easier shop handling



Association of Manufacturers of Chilled Car Wheels

445 North Sacramento Boulevard, Chicago 12, Illinois

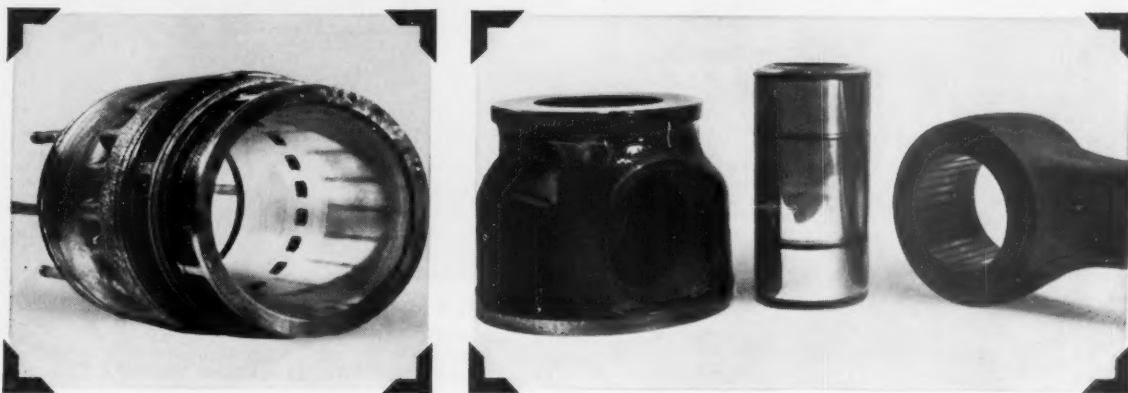
member companies:

Albany Car Wheel Co. • ACF Industries, Inc. • Marshall Car
Wheel & Foundry Co. • Griffin Wheel Co. • Pullman-Standard
Car Mfg. Co. • Southern Wheel (American Brake Shoe Co.)

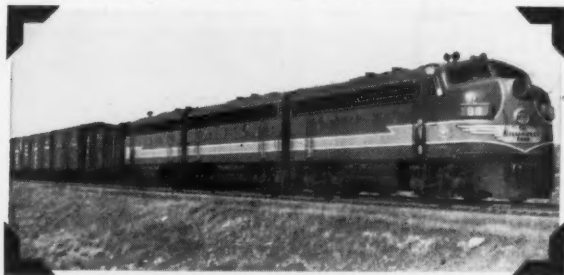
THE ENGINEER'S REPORT

DATA
LUBRICANT *RPM DeLo Oil R.R.*
UNIT *Diesel locomotive*
SERVICE *Mountain freight haul*
CONDITIONS *Long, continuous grades to 1.6%*
FIRM *The Milwaukee Road*

333,590 freight miles—only 0.0035 inch liner wear!



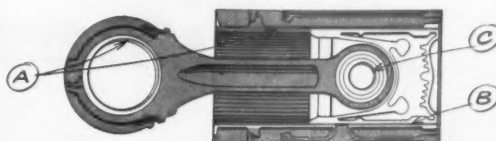
LUBRICATED WITH RPM DELO OIL R.R., this representative cylinder assembly was in good condition when pulled for regular inspection after 333,590 actual freight miles. Operation was on The Milwaukee Road's tough run between Othello, Washington, and Avery, Idaho. This liner, shown as it came from the engine, miked only 0.0035 inch wear, 0.001 inch taper, despite hard operating conditions—heavy loads, wide temperature variations, heavy grades, including one stretch of 20 miles of continuous 1.6 percent. Neither wristpin or bushing showed measurable wear.



FREE CATALOG: "How to Save Money on Equipment Operation," a booklet full of valuable information, will be sent you on request to Standard Oil Company of California, 225 Bush St., San Francisco, Calif.



How RPM DELO Oil R.R. prevents wear, corrosion, oxidation



- A. Special additive provides metal-adhesion qualities...keeps oil on parts whether hot or cold, running or idle.
- B. Anti-oxidant resists deterioration of oil and formation of lacquer...prevents ring-sticking. Detergent keeps parts clean...helps prevent scuffing of cylinder walls.
- C. Special compounds stop corrosion of any bushing or bearing metals and foaming in crankcase.

FOR MORE INFORMATION about this or other petroleum products of any kind, or the name of your nearest distributor handling them, write or call any of the companies listed below.

TRADEMARK "RPM DELO" REG. U.S. PAT. OFF.

STANDARD OIL COMPANY OF CALIFORNIA, San Francisco 20 • STANDARD OIL COMPANY OF TEXAS, El Paso
THE CALIFORNIA OIL COMPANY, Barber, New Jersey • THE CALIFORNIA COMPANY, Denver 1, Colorado



The EP & SW No. 1, one of the first locomotives on the Rio Grande Division long since retired, now serves as a monument to the changes that create the past . . . assure the future.

Times have changed





TRAIN MASTER

Today on the Rio Grande Division, you see these 2400 horsepower Train Masters hauling the tonnage ... making top schedules. They mark the continuing progress on the Espee.

on the Southern Pacific



In a hundred years of railroading, the Espee has more than met the challenge of progress—with constant change.

Yet, one thing remains constant—top performance.

On the important Rio Grande Division, that performance is provided today by a pool of 16 Fairbanks-Morse Train Masters. As 2400, 4800 and 7200 horsepower locomotives, they handle east- and west-bound freight in manifest trains ... symbol trains ... and solid 100-car perishable trains.

This is typical of what sound management is doing to assure an even more progressive second century on the Southern Pacific.

Fairbanks, Morse & Co., 600 So. Michigan Ave., Chicago 5, Ill.

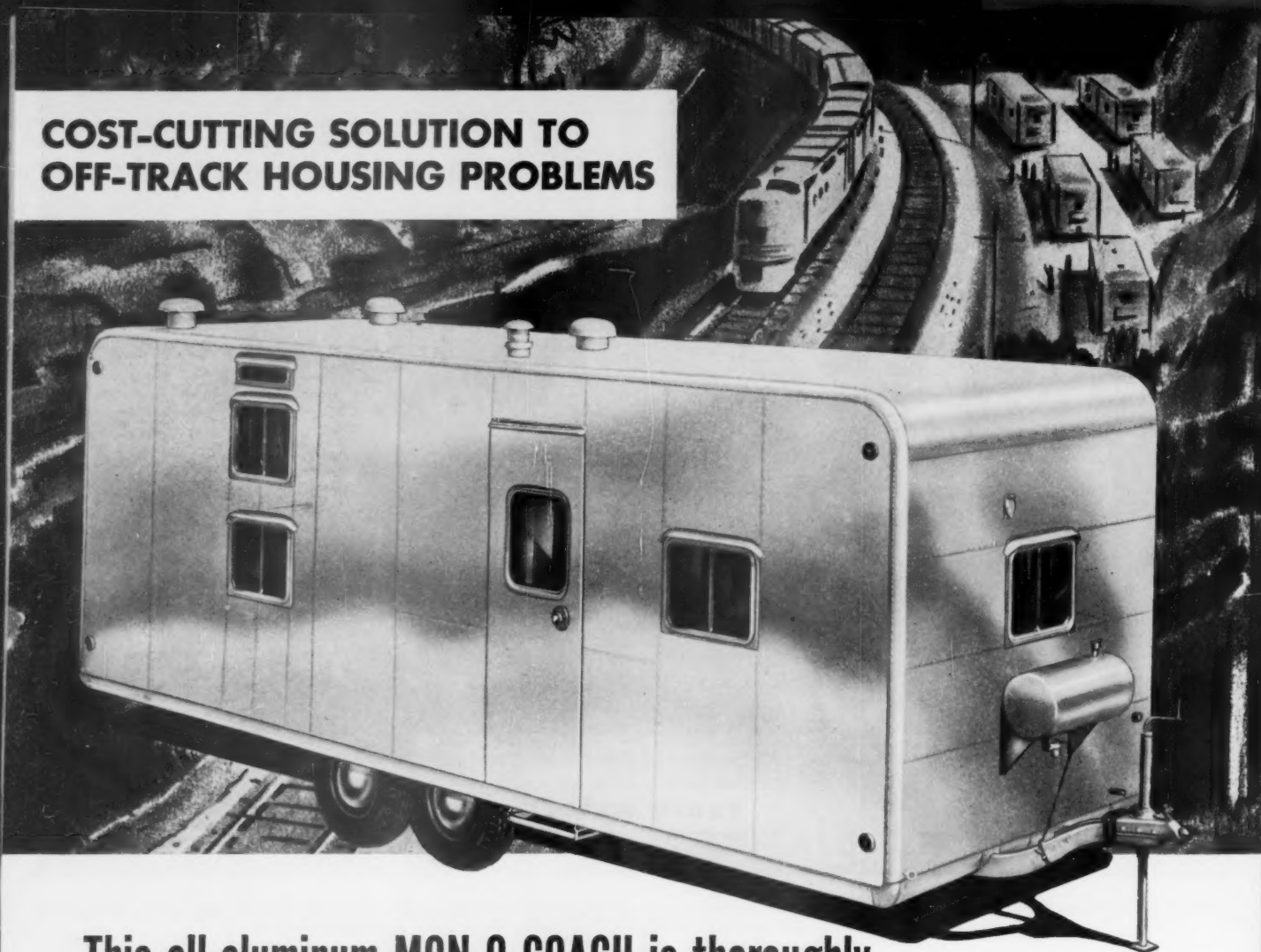


FAIRBANKS-MORSE

a name worth remembering when you want the best

DIESEL LOCOMOTIVES AND ENGINES • RAIL CARS AND RAILROAD EQUIPMENT
ELECTRICAL MACHINERY • PUMPS • SCALES • WATER SERVICE EQUIPMENT

COST-CUTTING SOLUTION TO OFF-TRACK HOUSING PROBLEMS



This all-aluminum MON-O-COACH is thoroughly tested, proved and *APPROVED* for railroad use!

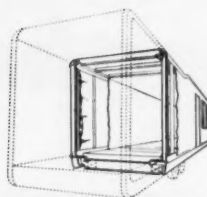
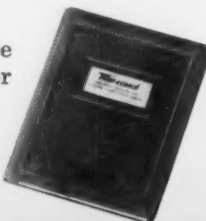
Here's the trailer that meets your exacting specifications. Before the first Mon-O-Coach was purchased for off-track housing, it was tested for several months over railroad right-of-ways. Rigid stress tests were made. Its ability to take all varieties of abuse was proved—*without a single failure.*

Several hundred Mon-O-Coach trailers are in use or on order for leading railroads—putting Mon-O-Coach way ahead of any other trailer built or planned for off-track use.

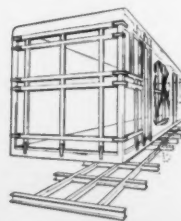
All-aluminum monocoque construction explains Mon-O-Coach's success. This single-unit, integrated body gives Mon-O-Coach durability that exceeds conventional trailers by 3 to 4 times!

Your exact requirements are readily met—for construction, performance and adaptability. Just give us your rough specifications, with a floor plan sketch, and we'll give you exact facts and figures.

If you haven't received your copy of the Mon-O-Coach Off-Track Housing Manual, write today.



Monocoque construction produces a single-unit, integrated body that is far stronger, safer and more durable than ordinary trailers.



Conventional trailers are essentially a box-on-frame, with certain weaknesses and limited durability.

Mon-O-Coach, INC.

2515 South Fourth Street • Louisville 8, Kentucky • Charles H. Becker, President • Phone Calhoun 5485

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Shining success story-Catering to V.I.P.'s

Very Important People indeed! They ride your suburban trains as well as your fast out-of-town streamliners. You'll please them all when you provide clean, shining trains!

The Whiting Train Washer can keep your cars beautiful at the fast rate of 90 feet per minute. Even hard-to-clean dome cars or double-deckers require only 1½ minutes from top to bottom, front to back. The Whiting Washer requires only one man to control solution spraying, brushing, final washing and rinsing. Manhours to clean an entire train is measured in minutes instead of hours. It *saves money!*

Spongy-soft brushes efficiently remove *all* the dirt and grime from the cars without scratching or abrading the finish. Car tilt is automatically compensated for . . . assuring uniform cleaning without streaking. Sectional brush design allows various arrangements to effectively clean indented windows, doors or other special shapes.

Make the most of every public appearance your "crack" trains make . . . wash faster and at lower cost with a Whiting Train Washer.

WHITING CORPORATION
15603 Lathrop Avenue, Harvey, Illinois



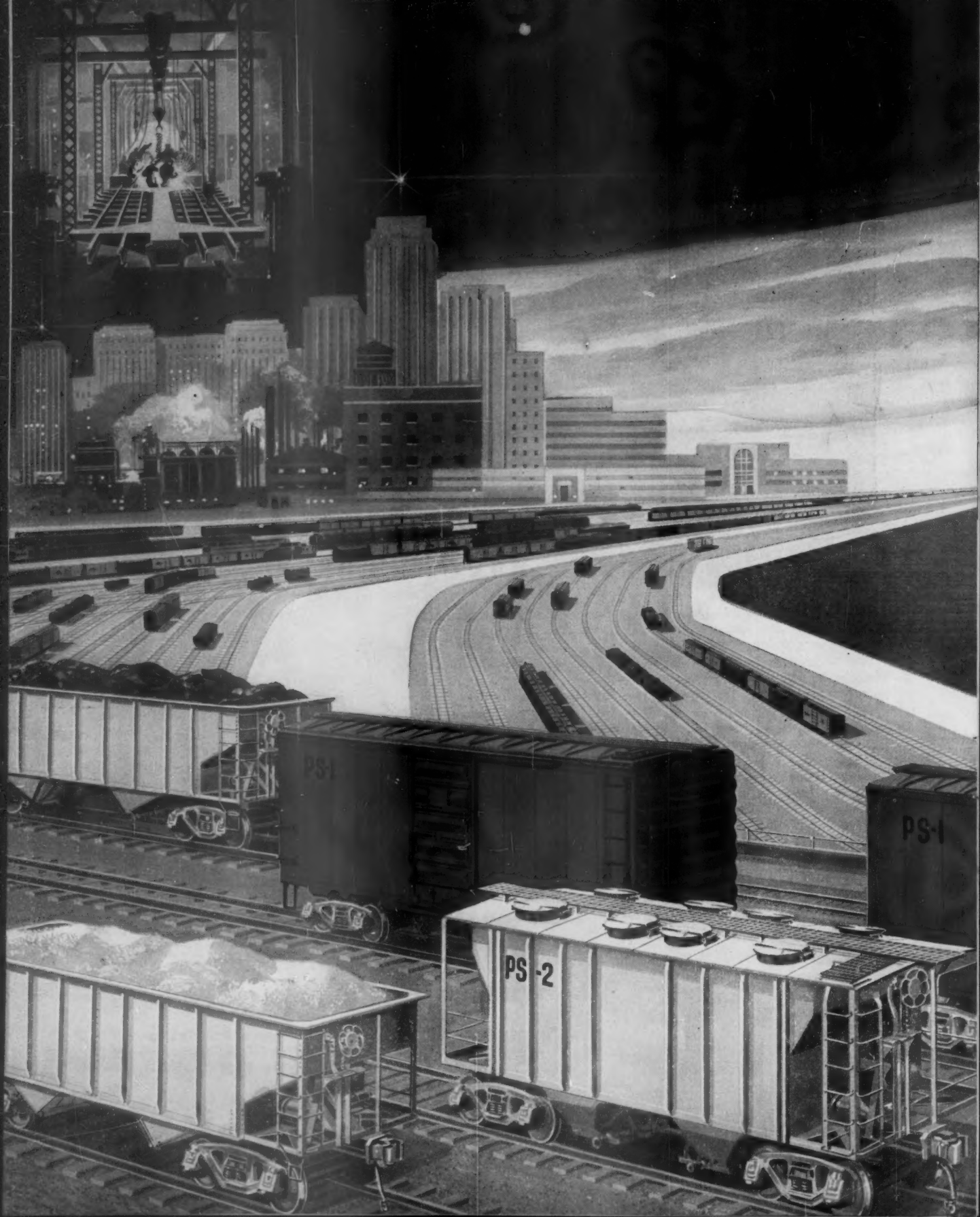
Discover for yourself how the Whiting Train Washer saves washing time and cost. Write today for Bulletin CW-C-409.



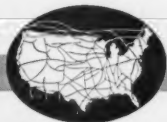
Here's the Whiting Train Washer "in action." Leading railroads everywhere depend on the fast, thorough washing provided by the Whiting Washer . . . make sure that every public appearance is a clean one.

Manufacturers of Drop Tables
Portable Electric Jacks
Wheel Grinders

matched men, machines and



materials build cars for the



GREAT AMERICAN RAILWAY *System*

You can see them wherever you go—the PS-1 Box Cars, PS-2 Covered Hopper Cars and the PS-3 Hopper Cars “built to serve best on the Great American Railway System.”*

Their outstanding performance is the result of car building which matches men, machines and materials.

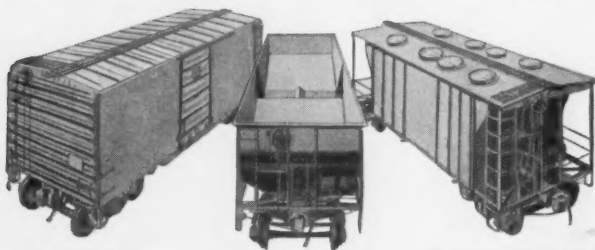
Trips through the vast Pullman-Standard freight car shops at Butler, Pa., Bessemer, Ala. and Michigan City, Ind., convince railroad executives of the unsurpassed quality and economy advantages effected by this unusual combination of production facilities.

By applying the skills of specially trained craftsmen to specific operations, better workmanship is assured. By utilizing job-designed tools, dies and jigs at each phase, more economical production is obtained. And by combining these elements with research tested materials, rugged strength, without weight penalties, is provided.

The in-service reports by Pullman-Standard field engineers prove the ability of these cars to earn more ton miles of revenue at lower cost per year of service. If you are interested in the modern trend in freight cars, write for a copy of the booklets describing the PS-1, PS-2 and PS-3.

*A typical box car moves, in one year, on 39 different roads, including two or more trips on 24 roads. (A.A.R. data)

Built to serve best on the **GREAT AMERICAN RAILWAY SYSTEM**



PS-1 BOX CAR

PS-3 HOPPER CAR

PS-2 COVERED HOPPER

YOUR NEEDS CREATE THE PULLMAN "STANDARD"

PULLMAN-STANDARD

CAR MANUFACTURING COMPANY

SUBSIDIARY OF PULLMAN INCORPORATED

79 EAST ADAMS STREET, CHICAGO 3, ILLINOIS

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MAKING A 100,000 MILE RUN...

STANDING STILL!

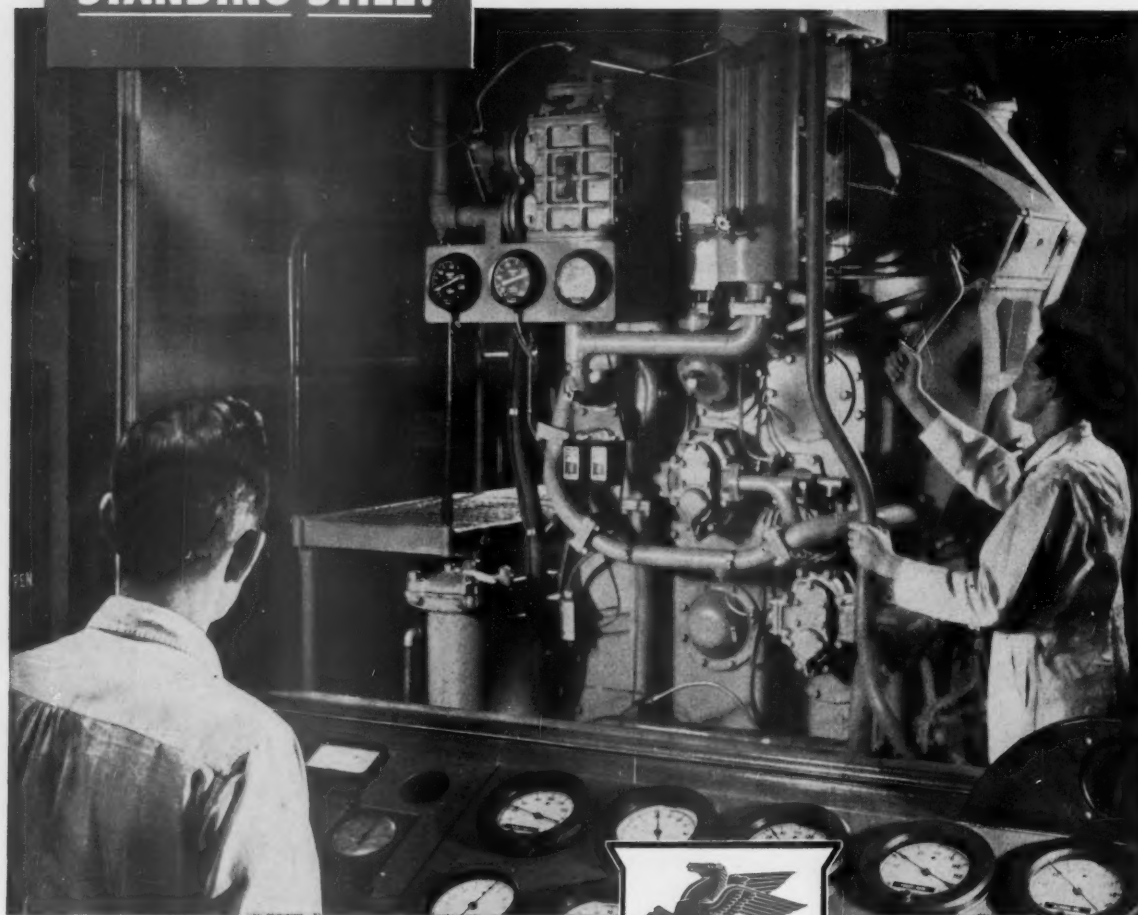
New locomotive-type test engine helps Socony Mobil continually improve Diesel lubricating oils and fuels!

With this special engine, Socony Mobil engineers can test—in the laboratory—the performance of lubricating oils and fuels under the varying loads, speeds and temperatures encountered by Diesel locomotives in actual runs. This is just one of the many ways Socony Mobil cooperates with operators and engine builders to help solve today's Diesel operating problems.

Experience from such cooperative research efforts—plus exhaustive field evaluations—has produced Diesel lubricating oils that keep engines clean—keep costs down...oils which are proving eminently successful on many major roads today.

Why not use our experience—and proved products—to improve *your* operations?

SOCONY MOBIL OIL CO., INC., Railroad Division, 26 Broadway, New York 4, N. Y.



SOCONY MOBIL



*Correct
Lubrication*

WORLD'S GREATEST LUBRICATION KNOWLEDGE AND ENGINEERING SERVICE

What's New in Products

Two-Way Grip for New Rail Anchor

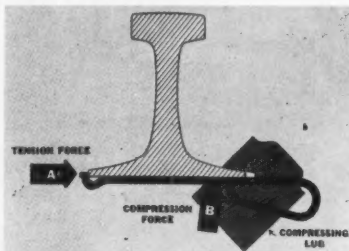
A new "Bulldog" rail anchor, for which the manufacturer claims 25% greater holding power than for the previous design, has been announced. Design changes in the anchor were made for the purpose of adding vertical compression to lateral tension, resulting in a two-way grip on the rail.

The new anchor, which is similar in basic design to its predecessor, consists of two elements—a double-jawed clamp and a heavy-gage spring, which are assembled at the factory into a single unit. The clamp has tapered double jaws which accommodate new or worn rail. The spring is lipped at one end to grip the rail base and looped at the other end to provide continuous spring force to hold the clamp on the rail.

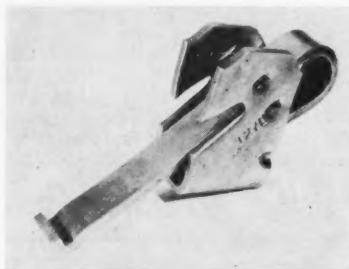
Special lugs in the clamp of the new anchor are said to be responsible for increased holding power. These lugs provide a seat for the looped end of the spring which, under the resulting compression, is said to exert great upward force. Coupled with the lateral tension which pulls the jaws of the clamp onto the rail base, this force secures the anchor in place with a two-way "squeeze."

The manufacturer cites these additional features which are maintained in the design of the new "Bulldog" anchor:

Flat tie-bearing surface of the clamp adds to anchor's staying power without damaging tie; may be installed by one man using any striking tool; cannot be overdriven—spring absorbs force of heavy blows during installa-



COMPRESSIVE FORCE, created by action of loop against lugs in clamp, supplements tension in spring in securing anchor to rail base.



NEW ANCHOR consists of two elements—a double-jawed clamp which fits over base of rail and a heavy-gage spring.

tion; not affected by frozen ballast; shipped in 10-anchor bundles for easy handling; does not damage rail in event of derailment. *True Temper Corporation, Railway Appliance division, 1623 Euclid ave., Cleveland 15.*

Steam to Diesel Conversion Units

Package units for converting Bucyrus-Erie 150-, 160-, 200- and 250-ton railway cranes from steam to diesel-torque converters are offered as an economical means of modernizing old steam-powered machines instead of replacing them with complete new diesel-powered equipment.

These units include a friction type transmission which can reverse the machinery controlling the hoist, swing and propelling motions without stopping the unit to engage a clutch.

For conversion of the 150- and 160-ton cranes, a Caterpillar D-337 diesel engine is used; for the 200- and 250-ton models, a General Motors 6-110 diesel. A twin disc converter with end shaft and housing for chain drive is included in each package along with

air-operated clutches, an air compressor and a lighting unit. *Bucyrus-Erie Company, South Milwaukee, Wis.*



Laminated Sandwich Insulating Panels

Hasko-Struct is an insulated sandwich panel construction in which Fiberglass cloth polyester laminate facing sheets are bonded to various densities

of Styrofoam, plywood and other types of core material. This is said to result in unified panel construction with structural strength, good insulating qualities and light weight. Specific design and engineering requirements can be met by varying the combinations of materials incorporated into the basic construction.

The panels are resistant to moisture, vermin, impact damage and deformation.

The surface finish is an integral part of the face sheets and eliminates need for additional finishing treatment. The auxiliary shapes (strips, angles, channels and jambs) match the panel face sheets in surface appearance and, like the panels, can be cut with hand or power tools. *Haskelite Manufacturing Corporation, Grand Rapids 2, Mich.*

Fire-Preventive Drum Cover

The Thermo-Acting drum cover can convert any used steel drum or standard trash can into a fire-preventive container. The cover produces a safe receptacle for oily rags, paints, solvents, packing materials, or waste paper.

The red-painted drum cover is a sturdy, snug-fitting steel stamping attached with a special hinge to an adjustable steel band.

To make a container, the band is placed around the upper part of the drum with cover closed for correct positioning. The wing nut on the band is then tightened and the cover raised ready for use. Normally the cover stands open to receive waste materials. It is held in this position by the hinge's spring plunger unit which contains a low melting point fusible link. Should a fire occur inside or outside the can, the fusible link melts, releases the spring loaded plunger, and closes the lid.

The fusible links are quickly and easily replaced. Covers are available to fit 55-gal and 30-gal steel drums, standard trash cans, and 11-in. diameter pails. *Protectoseal Company, 1920 South Western ave., Chicago 8.*

Break-In Oil

Micro-Lube is a specially processed lubricating oil that is blended with the crankcase oil and fuel in all types of internal combustion engines. It is recommended by its manufacturer for

More New Products

use during break-in and tune-up periods because it is claimed to reduce engine friction. Micro-Lube also acts to eliminate the formation of sludge, carbon and varnish by disintegrating the chemical binders in these engine deposits. It is also said to remove condensation in the fuel system and crankcase. Because of its claimed high affinity for metal surfaces, Micro-Lube gives lubrication during cold starts and inhibits the formation of rust and corrosion. The manufacturer states that, when blended, it does not affect the viscosity of lubricating oils. *Micro-Lube Sales, 2030 Irving Boul., Dallas, Tex. •*



Compressor

This air-cooled two-stage compressor is driven with a 125-hp electric motor. It has force-feed lubrication, full free-air unloading, and a single-core horizontal-flow intercooler. Channel style valves are used. Permanent installations can be made with a minimum of foundation, and the weight of the unit allows it to be moved from job to job. Either constant-speed or dual control can be furnished. Dual control is supplied with automatic or manual selection permitting constant speed operation or automatic start-and-stop. *Ingersoll-Rand, 11 Broadway, New York 4 •*

Alkaline Detergent

Composition No. 120 is an alkaline detergent for spray cleaning of locomotive and car underframes, tanks, and running gear. It is used in concentrations ranging from 1/2 to 8 oz per gal of water, and is applied through air pressure or steam cleaning guns. It is claimed that the detergent action, even with low concentrations, will loosen oxidized paint as well as grease and road dirt. A pressure water rinse is recommended to remove the loosened soil and solution. *Oakite Products, Inc., 146 Rector st., New York 6 •*



Personalized Soap Tissues and Dispenser

Vervtex, a new personalized soap tissue announced by the Burlington Soap Company, is intended to keep soap consumption at a minimum and to assure a high level of washroom sanitation in stations, cars and offices.

Vervtex dispensers, available in white baked enamel or chromium plated finish, release interfold tissues one at a time to assure control over consumption and waste. Dispensers are 5 7/8 in. high, 5 7/8 in. wide, and 2 7/8 in. deep; weigh 15 oz, and hold 325 tissues. A special strength adhesive is furnished for installation on glass, tile or other hard surfaces. *Mid-West Railway Supply Company, 332 S. Michigan ave., Chicago 4 •*

Ladder Leg Extensions

Ladr-Levl, a safety device easily attached to wooden or steel ladders, has self-adjusting legs that are said to adapt themselves to any terrain, no matter how uneven. The ladder

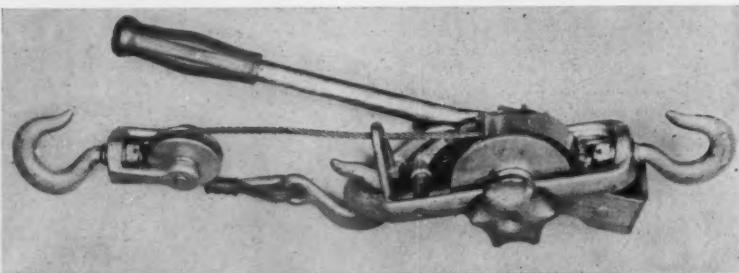
can stand upright, and it is said that the non-skid, swiveling feet prevent any slipping. There is sufficient adjustment to accommodate the standard 9 1/2-in. risers used on stairways.

When the user puts his weight on the first ladder rung, the mechanism locks automatically in place, and can be unlocked only by hand. The weight of the ladder is always directed down along the side rails and lateral stresses are said to be eliminated. Installation of this device is reported to be simple, and it can be transferred from ladder to ladder. Ladr-Levl is made of an aluminum alloy, withstands a 1,000-lb ladder load test, and weighs 5 lb. *H-B Industries, Inc., 1401 Middle Harbor Road, Oakland, Cal. •*



Safety Message Cups

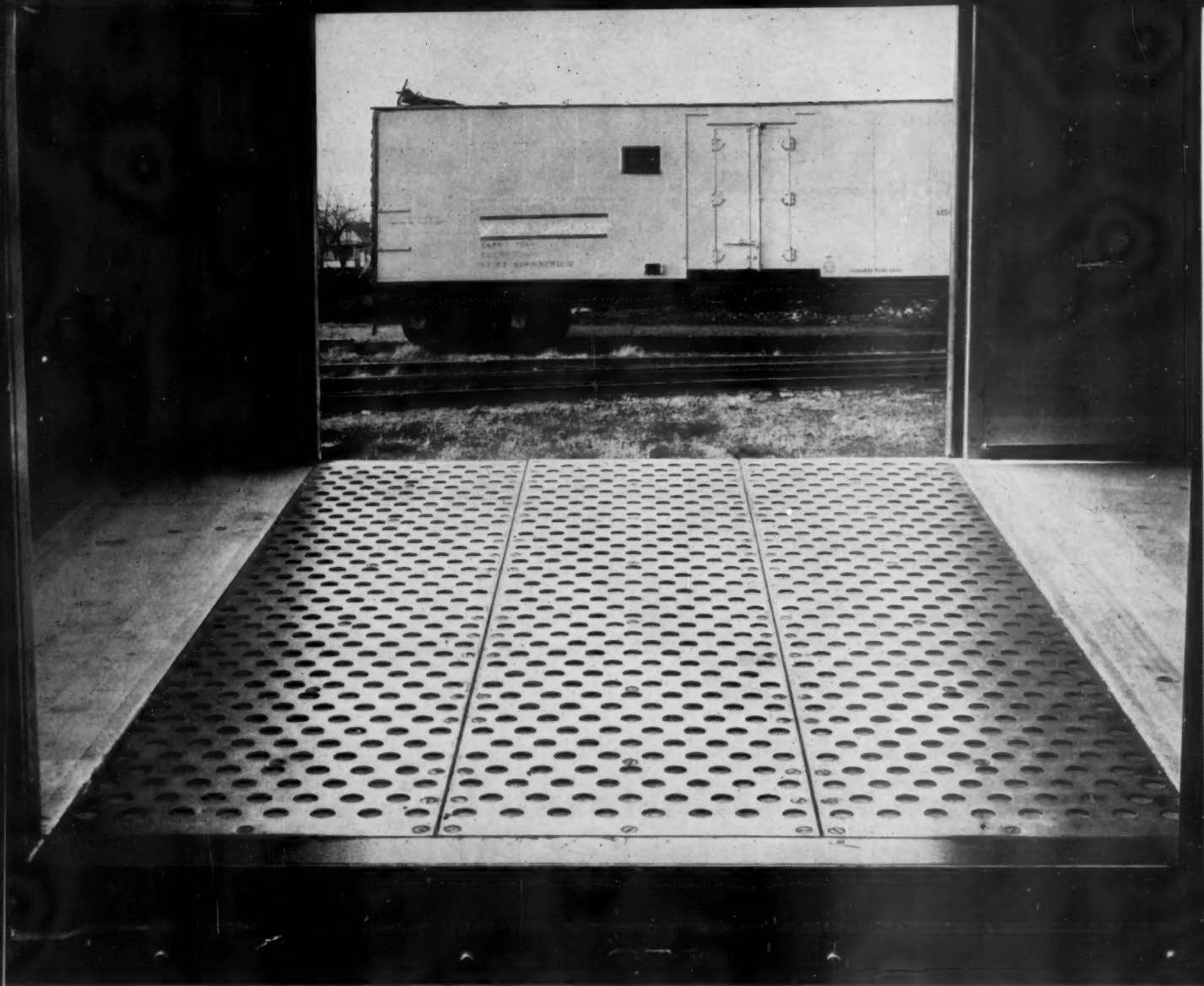
Safety messages are applied to the various types and sizes of Dixie paper drinking cups. Thirty-six different safety messages, printed in a series and assorted within a single carton, are available as an aid to safety campaigns. The designs and slogans were developed to have a strong impact upon cup users. *Dixie Cup Company, Easton, Pa. •*



Hook-Up Device

This Type R Pull-a-way hook-up device can open freight car doors, move motors and machinery, and perform many similar operations. When double-reeved, it can exert a pull of 3,000 lb. To hold the weight down, a number of the parts are made of Tenzaloy, an aluminum-zinc-magnesium alloy. The wire cable is flexible enough to wind on a 2-in. drum and is long enough to give 5-ft 6-in. of pull when double strand, and 14-ft when single strand. For close hook-up, the operating han-

dle has an 8-in. minimum movement, and is removable and reversible. The reversible pawl wheel permits automatic load lowering. There are two hooks which anchor the unit and fasten to the load. These hooks are designed to bend if overloaded, but will not snap. Other safety features include double interlocking pawls, automatic notch-per-cycle let-down, and a handle which bends before any other part of the unit fails. Total weight is 9 lb. *Wright Hoist division, American Chain & Cable Co., York, Pa. •*



THIS **Standard** METAL FLOOR PROTECTOR IS FREE!

Here is a STANDARD RAILWAY component that costs nothing. Seventeen years ago, this metal floor protector was put into a new car. Today that car is scrapped, but the *Standard Metal Floor Protector* has gone into a rebuilt car!

Free? How many times do you re-floor a car at the doorway in seventeen years? The original car carrying this floor-protector was never re-floored—nor will its successor be. We think this Standard Metal Floor Protector is making money.

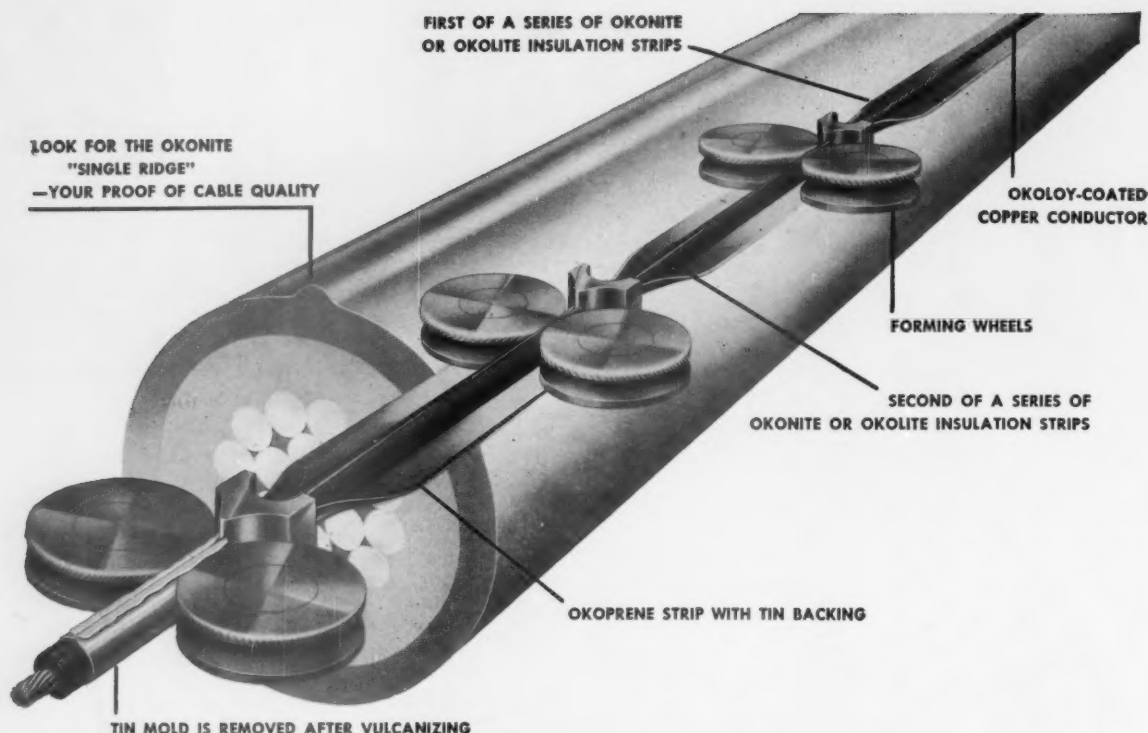
Standard

RAILWAY EQUIPMENT MANUFACTURING COMPANY

GENERAL OFFICE: 4527 Columbia Avenue, Hammond, Indiana
New York • Chicago • St. Paul • San Francisco

Standard Railway Equipment Manufacturing Co., (Canada) Ltd.
Sun Life Building, Montreal

MANUFACTURERS OF—Standard Improved Dreadnaught Ends—The Standard Diagonal Panel Roof—Standard Metal Floor Protectors—Standard Coupler Operating Device—Standard Positioning Device with Coupler Height Adjustment—and The Standard Wheel Truing Machine.



Why the strip-insulating process assures longer cable life

As one of the oldest manufacturers of rubber-insulated cable, Okonite has made cable by all the known methods, namely the extrusion, dip and strip-insulating processes.

Long experience with these methods has convinced Okonite engineers that the strip process produces cables which are longer-lived and more reliable than those made by other methods. The following advantages explain why Okonite-Okoprene and Okolite-Okoprene cables are made by this method.

Perfectly centered conductors. The strip process is the only one that assures perfect centering of conductor. Insulation is uniform in thickness throughout cable length. There are no "thin spots."

Uniform vulcanization. Vulcanizing under pressure in a continuous metal mold makes the insulation tougher, more dense; physical and electrical characteristics are improved.

Single cure. Vulcanizing insulation and sheath in one operation is possible only with the strip process, thus avoiding shortened insulation life. Multiple vulcanization shortens the life of rubber compounds.

Strong bond. Single, simultaneous vulcanization in a metal mold under pressure insures permanent bond between insulation and sheath. This prevents "push backs" during installation, ionization at potentials above 2000 volts and water blisters in wet locations.

Quality control. Unlike any other method, the strip process permits electrical testing and visual inspection of each strip of insulating and sheathing compound both prior to and during application. These controls assure a void-free, uniform, solid dielectric wall.

Cables manufactured by this strip process have outstanding performance records. Next time you purchase cable for any circuit installation, insist on the one cable made by the strip-insulating process . . . specify Okonite-Okoprene or Okolite-Okoprene. For a full review of strip-insulating advantages, write for Bulletin RA 1069; The Okonite Company, Passaic, New Jersey.



OKONITE



insulated cables

3138

"Where Were You When the War Was On?"

The reorganization of the Railway Business Association—now called Railway Progress Institute—for a more vigorous career in railroad promotion, could not have come at a more propitious time. After many months of study and discussion, an intelligent and comprehensive program for long-postponed reforms in government policy toward transportation (the so-called "Cabinet Committee Report") now awaits action by Congress. Not since the enactment of the Transportation Act of 1920 has transportation legislation of such far reaching importance been put up to the national legislature—and with such completely objective and non-partisan support.

This Cabinet Committee Report does not, of course, command equally enthusiastic backing for each one of its recommendations. Some railroad people are wary of the "volume" rate proposal. Shippers in some localities—dominated more by history than by contemporary events—are still opposed to repeal of the long-and-short-haul clause of the present regulatory law. And so on—but these exceptions are not important or significant. What is important and significant is the fact that *practically everybody with any knowledge of transportation conditions believes the enactment of some or all of the recommendations in this report is necessary to the national welfare*—the only noteworthy exception being a few highly vocal special interests. There is never any situation so bad, but that some people have a vested interest in its continuance. And so, of course, those who have a selfish advantage in continued artificial restraints on the railroads are going to continue to fight for their retention.

If the "court of public opinion," and of legislative action, operated as a court of law does—rather than, as it does, by a show of hands—there could be no great concern for the outcome of the process initiated by this Cabinet Committee report. Its adoption, at least in large measure, would be a foregone conclusion. But a legislature is not a court of law, and petitioners to a legislature need more than merely the weight of evidence to assure their victory. They also need votes—and the way they get the votes is to take their evidence to the "grass roots." That is, they have to show

Mr. John Q. Citizen that the proposals are advantageous to the country and advantageous to him.

Trying a case before a court of 80,000,000 judges is a man-sized assignment. The railroads themselves, alone, haven't got enough people to do the job adequately. Hence, the task just won't be done as it should be, unless a lot of the railroads' friends will organize themselves effectively to do a substantial part of the educational work. That is the purpose behind the formation of the Railway Progress Institute—and the caliber of the men who have devoted scores of hours of their valuable time to setting up this reorganized association is the best guaranty of its integrity and competence.

After all, the suppliers of other important industries have long been leaders in popular educational activities in behalf of their customers' business. Witness the publicity for heavy highway expenditures by the automotive and tire manufacturers—and the campaigns of the plane manufacturers in behalf of air transport development. There is no one thing that would so certainly assure the future growth and prosperity of railroad manufacturers as to see the laws changed which are artificially and arbitrarily keeping the railroads in semi-depression.

The Railway Progress Institute is closely associated with the Federation for Railway Progress. In conjunction, these two organizations are providing a common meeting ground for all friends of the railroads except railroad corporations themselves. The Railway Progress Institute is seeking its members among the larger suppliers (those in the \$1,000-and-up dues bracket), with the hospitality of FRP especially extended to the smaller firms. There's no objection to a company's belonging to both organizations, of course (a good many do)—but there is also no competition between the two organizations for the same companies as members, and the RPI is a substantial contributor to the budget of FRP.

Back in the early days of World War I, before the draft, a favorite recruiting argument ran like this: "What will you tell your grandson when he asks you what you did in the big war?" We commend this question as an argument for membership to the Railway Progress Institute and to the Federation for Railway Progress. For suppliers who will take the trouble to examine the facts, we believe there are mighty few of them who will not feel called upon—for selfish as well as other reasons—to join one or the other of these organizations.



BEAUTY AND COMFORT characterize new Hutchinson station. Large canopy (left center) covers train-platform area. Note how use of open dividers between canopy and

platform carries through window lines and adds to apparent size of building. Placing of evergreen shrubs along platform and sidewalks adds touch of color.

ON SANTA FE AT HUTCHINSON . . .

Pace Setter in Station Design

Design features of new passenger depot combine to give striking appearance inside and illusion of larger size outside

Ultramodern plus—that's the Santa Fe's new passenger station at Hutchinson, Kan. The new structure replaces an old three-story brick building, built in 1897. During its long years of service the old station was remodeled and repainted many times. However, it had reached a point where it was no longer satisfactory for serving the road's patrons at Hutchinson.

The new station, located just west of the old building, is nestled in a grove of large trees, adding a touch of natural beauty to the site. To carry out the "suburban" aspect of the setting, the station platform is decorated with a variety of evergreen shrubbery, planted in openings along the concrete platform and sidewalks.

Built with long, low, modern lines, the station is of steel and brick construction with terrazzo floors and a wide, flat overhanging roof. The roof is of built-up tar and gravel over precast and prestressed concrete slabs.

The walls of waiting room and ticket office are almost entirely of glass, except for the south wall in the waiting room, which features exposed brick masonry, complete with a recessed planter section and a wood-burning fireplace. A 4-ft wall, topped by a planting box, separates the waiting room from the ticket, telephone and locker facilities. Above this wall hang four ornate aluminum lighting fixtures, which were designed and made for the new building in Sweden.

Two doors are provided in the ticket-office section, one on the south for the use of automobile passengers, and one on the north side which leads to the train platform. Adjacent to the ticket counter are rest rooms and a utility room. In addition, a two-level baggage room with enclosed facilities for handling shipments of cream is provided.

Throughout the waiting room and ticket office areas specially rubbed walnut paneling has been used for trim. Illumination is provided by recessed fluorescent fixtures in the ceiling and by indirect fluorescent lighting along the walls. The entire building is air conditioned for both summer and winter operation.

The station is surrounded by reinforced concrete platforms and driveways. Parking space for 20 automobiles is provided adjacent to the station.

The new facility was designed by Fred Rydberg, under the general supervision of C. O. Coverley, system architect at Chicago.

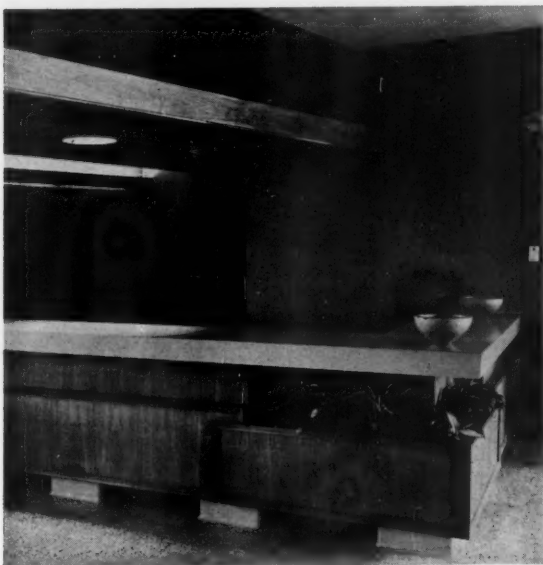


OLD STATION, located just east of new facility, was built in 1897, and, although remodeled several times since, had outlived its usefulness as a passenger depot.



INTERIOR of new building features terrazzo floors, walnut paneling and exposed brick walls. Fiberglass draperies,

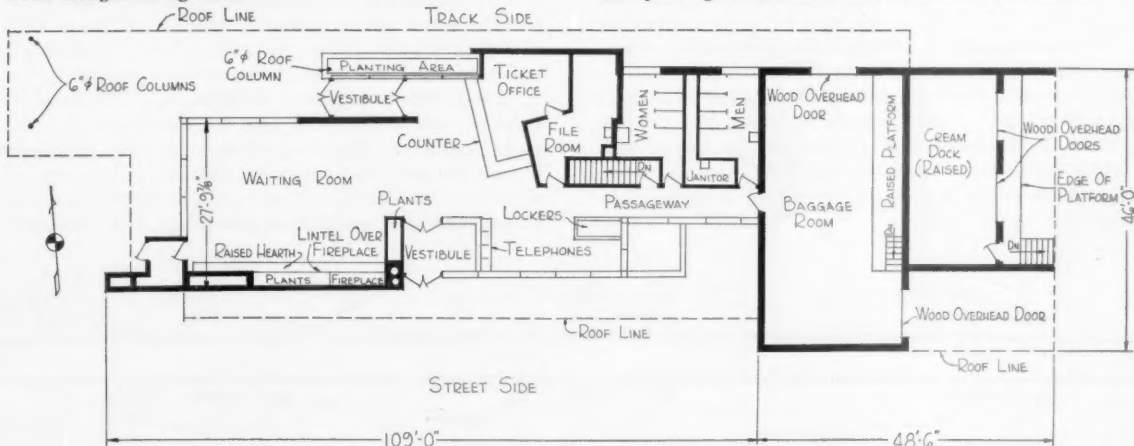
imported hanging lamps (left) and modern wrought-iron upholstered chairs complete the décor.



TICKET COUNTER is of walnut with a Formica top and built-in planting boxes at the corner. Lighting is provided by fluorescent fixtures recessed in ceiling and mounted in wood troughs along walls.

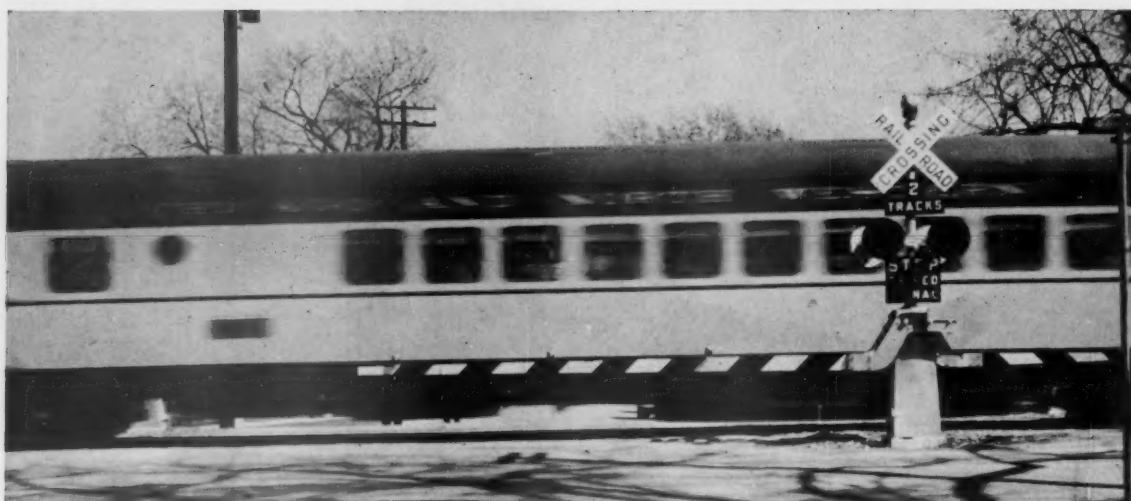


TWO-LEVEL baggage room, with wood overhead doors protected by roof overhangs, is located at one end of station. In foreground is portion of concrete paved driveway and parking area which will accommodate 20 cars.



STATION LAYOUT provides compactness, yet an air of comfort and roominess. Note how waiting room is some-

what secluded from other station facilities. Overhanging roof gives weather protection on both sides.



GATE ARM obstructs right-hand lane of street traffic approaching the tracks.

How Protection Was Improved

AT SEVEN CROSSINGS

On C&NW, at Oshkosh, Wis., where manual gates have been replaced by electric short-arm gates, flashing-light signals and "No Right Turn" signs are normally controlled automatically, with part-time manual supervision

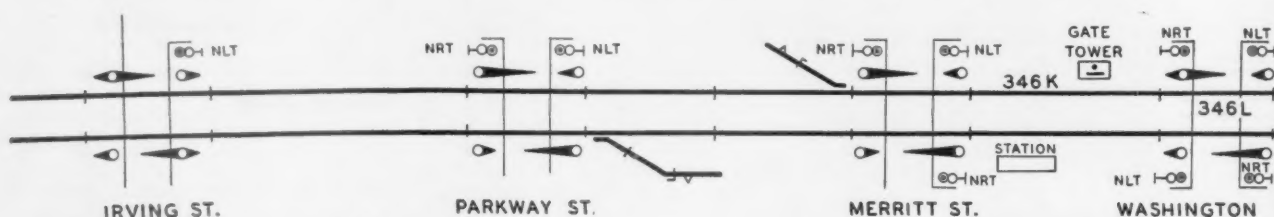
More complete protection, with automatic control, has been placed in service at seven grade crossings in Oshkosh, Wis., on the Chicago & North Western. Here the double-track main line runs through residential and commercial sections of the city. Washington street is the principal thoroughfare, and the other six streets carry normal city traffic. The railroad operates 12 passenger trains and six through freight trains daily, as well as two local freights—except Sunday. To serve industries, a switch engine works in this area several hours a day.

Previously, these crossings were protected 24 hours every day by pneumatic gates controlled manually by men in towers. One man controlled the gates at Waugoo and Otter streets, another man controlled the gates at Merritt and Parkway, and one man was on duty at each of the three other streets—Cape, Washington and Irving. Thus, five men were employed each of three tricks every day of the week.

In the new project, the short-arm gates and flashing-light signals are normally controlled automatically by track circuits. One man is on duty part-time, for supervisory control, which consists of using manual control to clear the gates to let street traffic pass during switching operations when no move over the crossing is imminent.

Years ago, as the town of Oshkosh grew up on both sides of the C&NW tracks, a broad street, 100 ft wide, was provided, with the double-track railroad down the center, and a paved roadway with sidewalk on each side of the tracks. This arrangement is still in effect for 1,250 ft from Washington street east to Cape street.

At crossings in this area, the new gates, with flashing-light signals, are located between the tracks and the paved roadway. Also, for guidance of drivers approaching on the east-west roadways, automatically-controlled signs, reading "No Left Turn" or "No Right Turn" are located on these roadways approaching each north-and-



INSTALLATION of protection in this area was complicated by the fact that the two tracks are located down the center

south cross street. The station is south of the track between Washington and Merritt streets, with platforms on both sides of the tracks extending between these two streets. At the rear of the station, an east-and-west driveway extends between Washington and Merritt streets, so that "No Left Turn" and "No Right Turn" signs are located at these street crossings. West from Merritt street, Broad street runs west alongside the tracks with a fence on the property line. No street runs along the south side of the tracks in this area.

The gates, in all instances, are at the right of the north-and-south streets, as viewed when approaching the tracks, and each gate arm is just long enough, when lowered, to extend halfway across the street, thus obstructing the right-hand lane of street traffic approaching the tracks. This leaves the other lane unobstructed to permit automobiles to depart from the crossing. At each crossing the gate mechanism for a street arm also operates a sidewalk arm. A second sidewalk arm on the other side of the street is operated by a special sidewalk mechanism.

The track circuit controls are based on 30 mph maximum train speed. On this double track, trains normally run on the left track. Track circuit controls for normal direction are about 1,500 to 1,800 ft long. Train movements against normal direction of traffic are at slow speed, so controls for reverse running are about 550 ft to 650 ft long.

When a train enters an approach-control track section, the flashing-light signals, gate lamps, bell and "No Right Turn" signs are operated for a warning period of 5 seconds. Then the gates are released, and are lowered in about 8 to 10 seconds. The gates are down a minimum of 10 seconds before a train arrives at the crossing. When the rear of a train clears a crossing, the gates are raised in about 6 to 7 seconds.

As an example of the use of the supervisory control—a switch engine approaching from the west on the eastward main track lowers the gates automatically at Merritt, Washington and Waugoo streets. However, the switch engine stops before reaching Merritt street for the purpose of setting out a car on the factory spur west of Merritt street. Therefore, the towerman, by pushing a red button, cuts out the protection and raises the gates at Washington and Waugoo streets so street traffic can cross without further delay.

At the time the button is pushed, a 1-in. red lens, above the track symbol for Washington and Waugoo streets, is lighted as a reminder to the towerman that he has cut out the protection and therefore is responsible for watching the switching. When he sees that there is to be a move toward Washington street crossing, he then pushes another (black) button. This causes the protection to be set in operation automatically.

At each crossing there is a cast-iron box, locked with

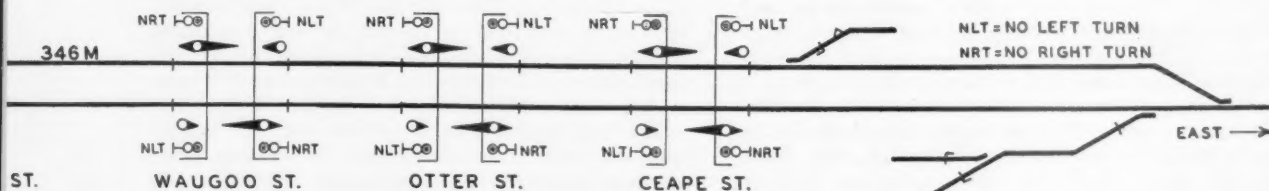


AUTOMATICALLY CONTROLLED SIGNS direct drivers not to turn onto tracks.

a signal department padlock, which contains a three-position switch. If a failure causes the gates to operate improperly, the maintainer is called as soon as possible. Then he, or some other railroad employee under his direction, can use the special switch in the box to control the flashing-light signals and gates directly.

By moving the switch handle to the right, the gates are raised by direct application of battery to the control relay, cutting around all other relay selections. The switch handle is moved to the left to lower the gates and operate the flashing-light signals. The switch, in its normal position, is on center. Experience on the C&NW proves that this special local manual control is an important aid in reducing delays to street traffic when failures cause improper operation of the crossing gates and when maintainers are making periodic inspections and tests.

The gates, flashing-light signals and supervisory manual-control machine for this project were made by the Griswold Signal Company. Track relays, control relays and motor-driven time-element relays at the crossings were made by the General Railway Signal Company. Installation was planned and constructed under direction of H. T. Fleisher, assistant chief engineer, communications and signals.



of a street with a driveway and sidewalk on each side of the tracks.



TRAILER-ON-FLAT CAR SERVICE is an all-railroad operation on the Union Pacific. Trailers are bright yellow, with band of red along bottom.

TOFC—Helping Hand for Box Cars

Trailer-flat car service on Union Pacific continues steady growth and aids in selling carload and less-carload business

Does a railroad-operated piggyback service siphon away the road's own carload traffic and result in pocket-swapping of revenue?

At least one major road doesn't think so. The Union Pacific, which initiated trailer-on-flat car service in August 1953, reports that its TOFC operation has, if anything, improved its carload and other business. Traffic representatives calling on prospective patrons for trailer traffic often obtain carload and less-carload traffic by showing the shipper that his particular traffic needs are best adapted to one of the railroad's particular services, i.e., less-carload, trailerload or carload, generally depending upon the volume involved and the service that best meets the shipper's situation. TOFC service has been a door opener to this kind of salesmanship.

The UP has, at the same time, enjoyed a steady growth in its trailer-flat car business. There has been a month-by-month increase in the number of trailers handled; and geographic expansion has automatically followed.

The first UP trailer-flat car service was established between Los Angeles and Las Vegas, Nev. It was soon extended to the Salt Lake City area. Later, it was expanded to principal points in Idaho, eastern Oregon and western Wyoming, and the road began second-morning trailer delivery from the West Coast to about 100 communities in Utah and Idaho.

Still further expansion took place in 1954. In July, the road opened to TOFC service between principal cities in the Pacific Northwest and points in Idaho-Utah; three months later, interchange service with the Southern Pacific was instituted between the San Francisco Bay

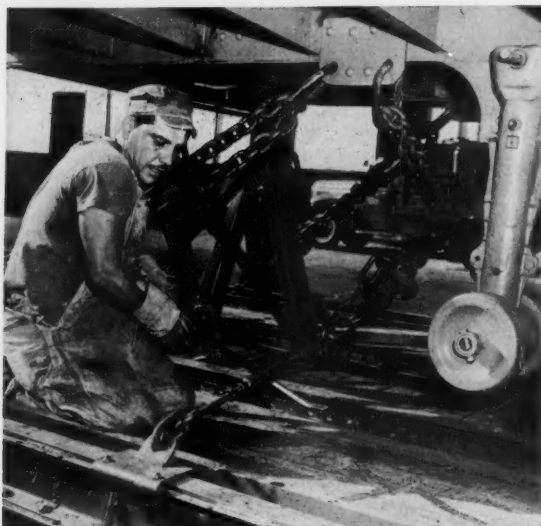
area and Idaho-Utah, and in January of this year the interchange arrangement was expanded to include trailer-flat car traffic between the Pacific Northwest and cities in central and southern California. In short, the UP, in 18 months' time, extended TOFC service over its lines from Los Angeles and Salt Lake City to central and northern California and to Seattle.

This past month it inaugurated a new service between Omaha and Kearney, Neb., contemplating movement of shipper's own trailers and contents consisting of fresh meats and packing house products. On July 18 it inaugurated an extension of the trailer-on-flat car service between Chicago-St. Louis and Denver, in conjunction with the Wabash and the Chicago & North Western. Western Trunk Line Tariff 445 names rates, rules and regulations on numerous commodities moving in trailer-load lots.

Trailer-flat car operation on the UP is an all-railroad undertaking. Rates, loading, unloading and distribution privileges, competitive with motor common carriers, have been published, assuring shippers all the incidental privileges of highway competitors.

The UP has found that in-transit time savings of TOFC service, as compared to normal carload movements, increase with distance because such traffic, together with merchandise, is kept together in fast trains, and intermediate yard switching delays are minimized.

The three general types of trailers—flat beds, regular vans and insulated vans—are used. End-loading ramps are used at most of the larger points. Portable ramps also are in use. The UP finds they permit unloading



DETAIL OF TIE-DOWN EQUIPMENT shows use of welded steel "fifth wheel" as support for front of trailer.

from either end of a car and eliminate the need to turn cars before unloading the trailers.

A large steel plant, built at Geneva, Utah, during World War II, became, after 1945, a major supplier of finished steel to southern California markets. By 1948 over-the-road truckers began to lure away some of this steel traffic, particularly for off-track receivers in various parts of the Los Angeles manufacturing area. Some of these were not in position to utilize full carloads; hence they patronized highway carriers who would move lots of 36,000 to 40,000 lb. The highway distance from Geneva to Los Angeles is 750 miles.

In an effort to prevent further erosion of this steel traffic, and to recover some of that already moving in highway service, the UP began loading steel on highway trailers at Geneva and handling the trailers on flat cars to southern California. Steel also moves from Geneva to central California via Ogden and the Southern Pacific. The UP already had end loading facilities at Salt Lake City. This provided adequately for the steel traffic in its early stages. Since that time modern unloading facilities have been installed at Los Angeles and Provo, Utah, to facilitate handling this steel as well as other commodities moving in trailers.

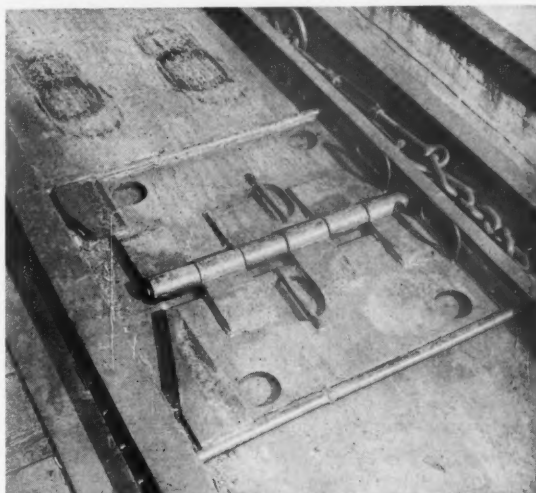
The loaded trailers are generally grouped together at one point in a regular manifest train. This permits prompt spotting, unloading and delivery at destination.

Many of the flat-bed trailers are now provided with stakes and side boards, making them available for return loading of commodities such as roofing, machinery, lumber, pipe, etc. Closed, or van type, trailers handle products such as lubricating oils and greases, paper products, rubber tires, appliances, canned goods, and dairy products.

Trailer business from Utah and Idaho has included canned goods, powdered milk, butter, cheese and related commodities. The railroad has used insulated vans to protect shipments against both winter freezing and summer heat. Tests have been conducted for some time using dry ice, as well as mechanical refrigeration, for protection of dairy products and other perishables. When dry



STEEL STRAPPING can be used to provide added bracing for trailer sides if the lading will permit lateral shift.



WHEEL CHOCKS are part of special equipment on flat car. Chocks are held in place by the slotted steel strips which are also permanent equipment.

ice is used, a supply is provided at the loading point, with reicing at Salt Lake City or Las Vegas, when en route to Los Angeles.

During the past year the railroad has published many quantity lot LCL rates, of 5,000, 10,000, 15,000 and 20,000 lb, affording shippers lower rates for the larger volumes. This gives the shipper trailerload rates, as well as less-carload rates subject to movements in cars, and also normal carload rates.

Another thing the UP has discovered to its liking is that TOFC service opens up new business potentials by providing a direct trailerload service from shipper's warehouse to consignee's place of business, even though it may be located off-track and a considerable distance from railroad sidings. Trailer-on-flat car service places the railroad in a position to effectively compete for this kind of traffic.



FOR A CHANGING SITUATION . . .

Additives Make Today's Fuels Better

Many grades aren't what they used to be—Railroads and refiners are treating fuel oils to improve them

Diesel fuel oils are undergoing changes in price and performance. Pumped into locomotive fuel tanks today is some oil that could give very unsatisfactory engine performance—but does not. Prices for distillate grades of oil have been going up along with demand—demand not only from railroads, but from other industry and from home owners. The ever-increasing demand for liquid fuels has been met not only by increasing the total output of crude oil, but also by increasing the yield of distillate from each barrel of that crude. In 1944 nearly 28% of refinery output was residual oil. Last year this figure was just over 16%. Improved refinery techniques had made some of this difference.

Greater Yield Today

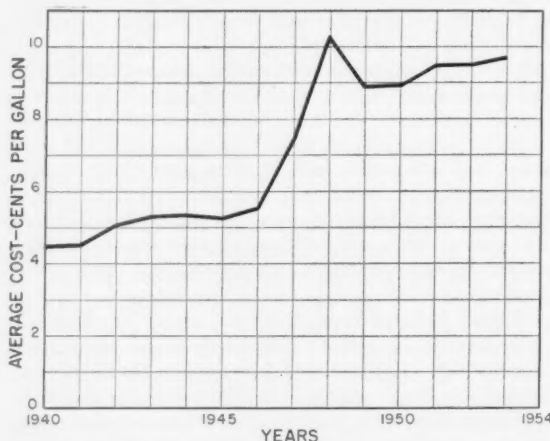
At one time, diesel and other distillate grades were removed from the crude in the refinery fractionating column only with heat. Today's greater yield is brought about by the catalytic cracking unit. Heating in the presence of a catalyst causes more of the oil to break down and produce additional distillate.

While making more available and holding the cost down, these changes in refinery technique have introduced new problems. The large hydrocarbon molecules that break down in the presence of a catalyst have a tendency to regroup if stored for long periods of time. In this form they will plug filters and form sludge in storage

tanks. Lower grade fuels can produce sparks and smoke. They can be difficult to pump in cold weather.

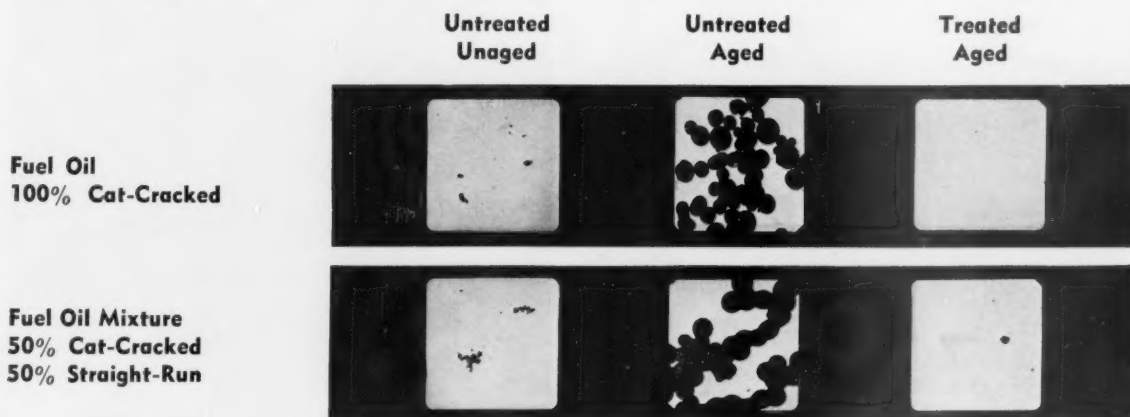
A variety of chemical compounds have been developed to modify these undesirable effects. Known as additives, they are usually placed in the oil at the refinery, although special situations can be met by a consumer doing his own treatment.

No single additive can correct all the possible defects



AVERAGE PRICE per gallon paid by Class I railroads for diesel fuel.

Close-up on Performance of Fuel Oil Additives



ACTION OF STABILITY ADDITIVE in a fuel oil prevents the development of an insoluble residue of large molecules that can plug fuel filters and cause injectors to stick. Electron microscope makes possible these photographs which are 4,100 times actual size. The mixture of fuel oils developed the worst condition of sludging if uninhibited,

but with proper additive treatment neither sample would give unsatisfactory engine performance. Bureau of Mines work has shown that 12 to 13 weeks storage at 110 F causes same deterioration as one year of normal storage. The 12-week specimens were "heat-aged" to show what their condition would be after a year in a storage tank.

that an oil can have, but some additives are effective in two or more fields. There are six categories for which additive treatments have been developed;

- To increase stability;
- To prevent injector sticking;
- To increase cetane rating;
- To improve combustion;
- To reduce storage tank corrosion; and
- To lower pour-point of fuel oil.

The most successful additives have been those which increase stability, and this is the most important additive application today. In doing this, they slow the formation of insoluble residue in catalytic-cracked oils and break up residue that has already formed. This prevents development of sludge in storage tanks and decreases the plugging of fuel filters. The compounds developed for stabilization react with the active chemical elements in the oil before they have a chance to react with each other. Usually from 10 to 150 lb of stability treatment are used per 1,000 bbl of oil.

Improved Combustion Needed

Improved combustion would lower fuel consumption and permit the use of lower grade fuels without smoking and sparking. However, this is the field where additive treatment has been least successful.

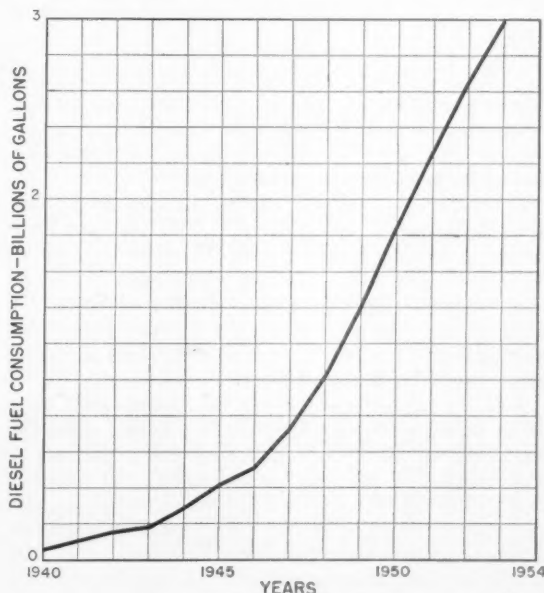
Reducing corrosion requires addition of inhibitors to the fuel because corrosion develops from those elements that are water soluble. Lowering the pour-point affects the cold-weather handling characteristics of the fuel and is most important in the lower grades.

Some fuel oils do not respond to additive treatment and each field requires separate investigation. Storage stability of additive treated oils also varies. In tests it has been found that additive treated oils in storage develop less residue than the same oils untreated. Mixing untreated oils develops more insoluble residue than a mixture of the same oils when treated.

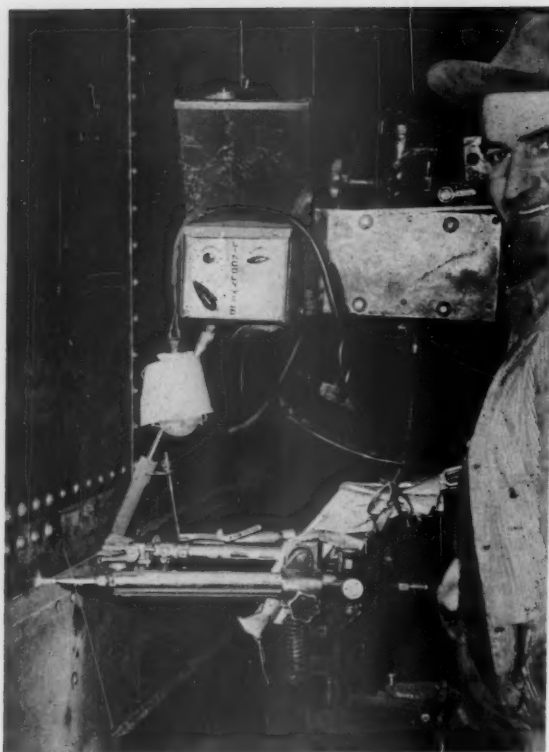
No special equipment or extra precautions are required to burn treated fuels. Preheating may make it easier to pump the residual types, but preheating does not aid combustion.

The additives that are used today are no more toxic than the fuels in which they are used. Rapid developments in the additive field may change the toxicity picture, however, and care should be exercised in working with all treated oil.

Much of this information was developed during a discussion on additives at the recent Corrosion Conference sponsored by the International Nickel Company at Wrightsville Beach, N. C.



YEARLY DIESEL FUEL CONSUMPTION for Class I railroads.



FLAME CLEANED ahead and guided by the knife-edged wheel, this submerged-arc welding equipment performed the last operation on a freight car production line. The reinforcement was welded to the side sill with the car on its own trucks. When complete, welding equipment was swung out of the way so the car could be moved out.



THIS SILL WELDING OPERATION used automatic submerged-arc equipment that required the open sided tray to hold the flux around the nozzle and against the work. The horizontal roller under the tray held the nozzle at the proper distance from the car side. Excess flux fell into boxes on the floor where some was salvaged for re-use.

How to Make "3-O'Clock" Welds

IN CAR ASSEMBLY

Making satisfactory welds on the horizontal seam between vertical members has been successfully done in the butt welding of side sill reinforcements to side sills during the assembly of box cars.

Using specially designed fixtures and Lincolnweld hidden arc equipment, both sides of a 50-ft car have been welded in from 16 to 22 minutes. The time and cost of beveling the two edges necessary with manual arc welding were saved. All edge preparation was eliminated by flame cleaning the seam ahead of the nozzle during the welding pass. This was done with a standard acetylene nozzle producing a neutral flame.

Both the side sill and the side sill reinforcement were 40-lb, 15-in. channels which were butt welded while the car stood stationary on its own trucks on a shop track. Two identical welding fixtures were used, one for each side of the car. Two automatic heads mounted on self-propelled carriages moved on 60-ft beams made of two 10-in. channels welded together. Each beam was supported by four I-beams set in the floor. The welding equipment was made adjustable both vertically and horizontally. This adjustment and the long reach built into

the fixture made necessary the splicing of the flux tube and nozzle cable.

The nozzle was kept in line with the seam by using a small bevel-edged wheel located ahead of the welding wire nozzle. Sharpened to a dull-knife sharpness, this wheel ran in the seam and guided the nozzle. This assembly was mounted in a spring cradle for freedom of movement and was aligned with the seam despite the variation between cars. A small sheet metal cup moved along with the welding nozzle and acted as a positioner for the flux delivered from a hopper to the seam. Excess flux was caught in boxes placed on the floor under the work. This excess flux was screened and then re-used.

The weld was $\frac{3}{4}$ to $\frac{5}{16}$ -in. and was made at the rate of 53 in. per minute along the 43-ft 4-in. length of the reinforcement. Welding grounds were made at opposite ends on the two sides and each machine was worked toward the ground on its side. The weld was started flush and was allowed to run off at the end. These ends were later checked with a hand arc. When the welds were finished, the fixtures and automatic head were folded back and the car was run into the yard for painting.

GRIME-BLITZER



How Oakite Steam Gun **BLITZES** grime from diesel engine base

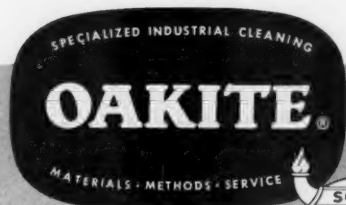
The Oakite GRIME-BLITZING Steam Gun gives you a power-packed mixture of steam heat, steam force and penetrating cleaning compound.

Hooked up to your own steam supply, the sturdy Oakite Steam-Detergent Gun cuts clean-up and rinsing time in half. Removes even the heaviest soils with ease from complicated structures and hard-to-get-at-places.

You can use the Oakite Steam-Detergent Gun to simplify and speed up other shop maintenance jobs like cleaning running gear, traction motors, trucks, locomotive frames (before fracture testing). And you can use the Gun for paint stripping. Does a *good* job.

You can get an in-shop demonstration without obligation. Just drop a line to Oakite Products, Inc., 46 Rector Street, New York 6, N. Y.

At the Allied Railway Supply Exhibit
Visit Booths: 13-14-15



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RAILWAY DIVISION

It's easy to
CUT WELDING COSTS

when you use a High-Speed

LINDE SWM-2

Trade-Mark

Portable Sigma Welder

Your welding department can easily make high-speed, low-cost fusion welds in aluminum, stainless steel, high temperature alloys, copper, carbon steel, and other metals with the LINDE SWM-2 Portable Sigma Welder. The LINDE SWM-2 is a complete control unit for manual sigma (Shielded Inert Gas Metal Arc) welding operations. It mechanically feeds welding wire from a coil into the weld area at a steady precontrolled rate and supplies a regulated quantity of argon to shield the weld from contamination by the atmosphere. No flux is used. In most cases the smooth, clean sigma welds need no post-welding treatment.

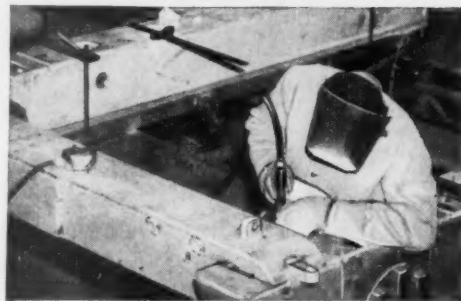
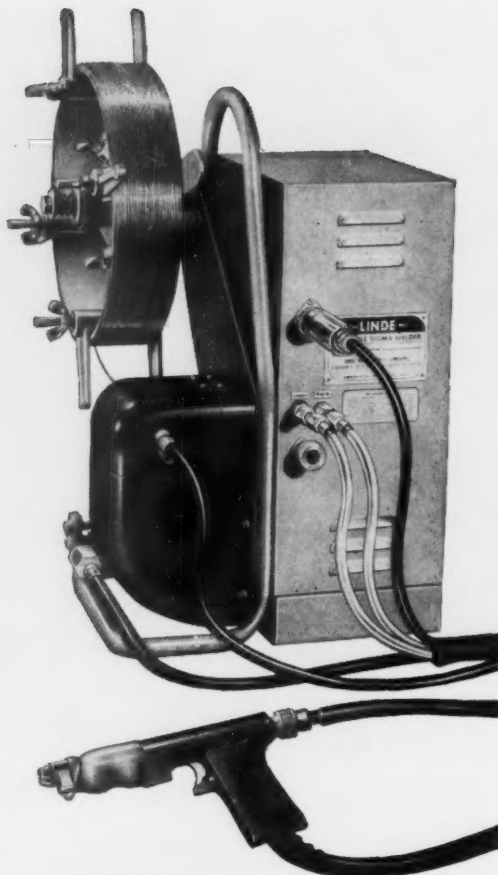
SIMPLIFIED AUTOMATIC OPERATION

The operator merely presses the trigger of the pistol type torch to energize the control circuit and start the flow of water coolant and argon gas. When an arc is struck by touching the consumable electrode to the workpiece, the wire feed automatically begins.


NEW CONSTANT POTENTIAL POWER SUPPLIES CAN BE USED

Either ordinary or constant potential DC power supplies can be used with a LINDE SWM-2. In constant potential welding arc voltages are preselected and held with outstanding consistency which permits positive starts and high-speed welds on thin metals.

Call your nearest LINDE office today for more information on how you can cut production welding costs with the LINDE SWM-2 Sigma (Shielded Inert Gas Metal Arc) Welder. Or write for your free LINDE SWM-2 catalog.



Production jumped 300% when the Heller Engineering and Manufacturing Company, Lynwood, California changed to sigma welding to fabricate aluminum engine shipping stands. Because the sigma welds were clean and sound, post-welding treatment was practically eliminated.

RAILROAD DEPARTMENT
Linde Air Products Company
A Division of Union Carbide and Carbon Corporation
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Supplying to railroads the complete line of welding and cutting materials and modern methods furnished for over forty years under the familiar symbol - - -





NEW YORK CENTRAL SUPERVISORY EMPLOYEES from Grand Central Terminal, New York, attend a class

on use of the telephone as a public relations tool. The instructor is an employee of the New York Telephone Co.

Listen for That 'Phone!

New York Central employees encouraged to answer calls quickly, courteously, completely, in system-wide campaign designed to build good will through proper telephone usage

New York Central management believes the telephone is one of the most powerful of all instruments for creating lasting goodwill between the public and the railroads. As a result, the road recently inaugurated a system-wide campaign to improve employees' use of the telephone.

Extensive Survey

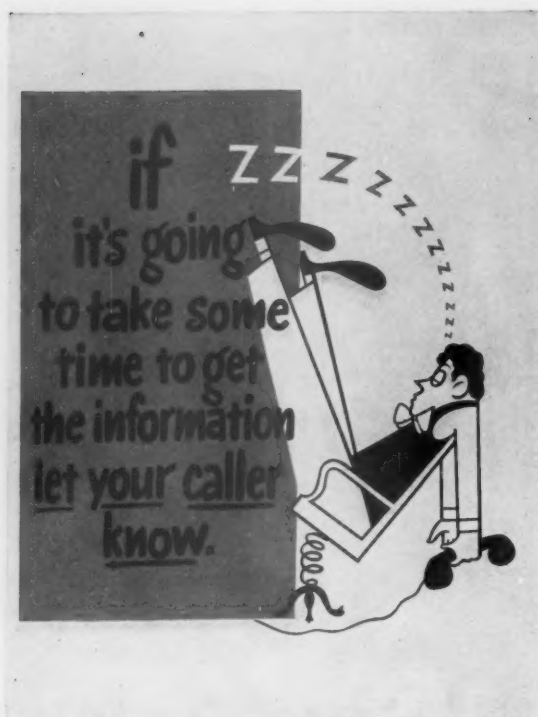
At the NYC's request, the New York Telephone Company studied how the railroad's customers were handled by telephone in the New York area. The survey, which covered substantially all departments of the railroad normally receiving telephone calls from the public, indi-

cated urgent need for a program to improve use of the telephone as a tool for creating and fostering better public relations.

It also was recommended that, apart from a training program, consideration be given to employees' working conditions. For example, does the Central have sufficient personnel to handle its telephone calls? Are employees given thorough job training and proper and adequate supervision?

Is adequate reference material available to help employees answer customers' questions? Are surroundings conducive to a good job, e.g., is lighting proper and is ventilation sufficient?

It was learned that, during the period covered by the



STRESSING THE IMPORTANCE OF GOOD TELEPHONE USAGE, these are some of the posters the New York Telephone Company has supplied to the New York Central.



survey, elapsed time between the first ring of a telephone and its being answered by an employee ranged from four to 583 seconds. A six-second interval is considered normal.

In addition, employees were occasionally sarcastic and rude to callers. Much actual misinformation was given to customers, and employees obviously were not aware of the imperative need of explaining to customers "why" the railroad finds it necessary to do things in certain ways.

It was found that 9% of the customers, actual or potential, had to telephone two, three and four different times to get the information they wanted.

Recommendations

Recommendations made by the telephone company to improve the Central's dealings with the public, based upon the findings of the survey, included: Answer all calls promptly, that is, within six seconds, or before the second ring; give callers complete attention as soon as the telephone is picked up; answer calls by announcing the name of the person answering, or by identifying the department and the name of the answering employee; when answering another employee's telephone, announce his name and the name of the person answering, and offer to help or to take a message.

Additional recommendations made by the telephone company were: Do not transfer calls unnecessarily, and, if it is necessary to transfer, explain to the caller why it is being done; speak clearly and use simple, straightforward language, avoiding slang and technical terms; be courteous at all times; express sincere interest in serving

the customer and be alert to all opportunities to be genuinely helpful.

All employees of the New York Central System who communicate with the public by telephone come within the scope of the training program. A special campaign of training has been developed for points on the system where telephone communication is unusually heavy.

The program to improve telephone usage also covers traffic agencies, including those off line, in about 42 states and two foreign countries.

Arrangements have been made, in areas not covered by the major portion of the campaign, for using telephone training materials, booklets on good telephone usage, and posters emphasizing the importance of good telephone usage. Such material is available from most local telephone companies. Cards also have been prepared to show correct enunciation and spelling. Films comprising a complete course in proper use of the telephone are available for railroad employees. The Central's Communications department is arranging for special refresher courses for PBX operators at all points on the system.

Courses for Supervisors

No special, or extra, staff is contemplated by the Central's telephone-training program, but arrangements have been made to have some of the road's supervisory personnel take two-day courses at various telephone companies.

It has become part of the supervisors' jobs to see that another piece of company equipment—the telephone—is used properly.

"It is very important," says NYC President Alfred E. Perlman, "that the matter of improving telephone courtesy be vigorously pursued." The Central's chief executive initiated the movement toward a training program by discussing, at one of his regular staff meetings, the Central's "bad telephone usage." Mr. Perlman said several friends, by telling him their own experiences about trying to get information from NYC employees, had made him sharply aware that the railroad was not taking full advantage of the possibilities offered by the telephone for making and retaining friends.

Permanent Part of Training

Because of the Central's belief in the telephone as a vitally important public relations device—not only for the NYC, but for the entire railroad industry—the program is regarded as a permanent part of the training all NYC telephone-using employees will encounter as a routine part of their jobs. In inaugurating the program, L. W. Horning, NYC's vice-president—personnel, said, to emphasize its continuing long-range nature: "While intensified training will take place during the next few months, I am sure our men and women will come to recognize that improved telephone usage and courtesy has to be a never-ending campaign."

Monthly Surveys Made

As a check on the success of the educational campaign, the telephone company makes monthly surveys on the Central's progress. Results of these continuing surveys, from which plans can be prepared for areas in which further training may be indicated, are sent to the road's Communications department, which, in conjunction with the Personnel department, is responsible for administration of the training program.

Even though the campaign to improve the Central's telephone relations with the public began only in mid-July, railroad officers already have been made aware of improvement.

The method of training used by the NYC is of special interest because its program has been established with the idea that responsibility for its success rests entirely on the shoulders of every officer, rather than upon specially assigned staff experts. Each major point has its own committee, consisting of representatives from all departments, working closely with the local telephone company.

The Bell system has coordinated this activity by bringing together for special briefing their representatives from all areas served by the NYC.

Customer Service Feature

The New York Telephone Company (part of the Bell system) provides, as part of its customer service, all necessary training facilities and personnel in the New York area.

The company has assigned to the Central one of its general service managers, on a full-time basis, for the duration of the campaign, and also has had prepared, specially for the NYC, a booklet called "Telephone Pointers," which will be distributed to all NYC telephone users.

Benchmarks and Yardsticks

THERE IS AN INTERESTING paper-bound book, entitled "The Lonely Crowd," currently available at a modest price at most places where large stocks of such books are displayed. The author is D. Riesman and his book contains a great deal of information that is helpful in understanding people. This paper-bound edition is abridged from a larger scholarly work which is more expensive.

The author divides people into three categories, according to the dominant motives which determine their actions—the "tradition-directed," the "inner-directed" and the "other-directed." He makes clear that no actual person fits perfectly into any one of these categories. Tradition-directed people are pretty scarce in North America today. They are those who follow their parents' occupations, accept their parents' beliefs and prejudices, and are usually quite happy and well adjusted to their surroundings, because they have no painful changes to make in their attitudes.

The "inner-directed" are those people who have rigid standards of conduct drilled into them—and whose behavior is largely governed, not by their surroundings and their associates, but by their built-in "gyroscope." Such people, if their training has been on a high plane, are capable of splendid behavior in trying circumstances. On the other hand, their gyroscope may take many forms. For example, it may include the rule that "business is business" (not subject to prevailing ethical standards), and hence may account for some rather questionable conduct, at times, by people whose non-business conduct is otherwise quite acceptable.

The "other-directed" people don't take their codes of behavior either from tradition or from inward controls, but largely from what they see other people doing, and what is popular.

The author believes that tradition-direction prevailed in most European communities during the Middle Ages. This was superseded by inner-direction, with a peak in Europe and America in the 19th century. Now, however, in the author's opinion, the dominant type—at least in urban America and maybe Europe—is the other-directed.

This predominance of other-direction has many facets which are of questionable value, e.g., the tendency to decide questions of right or wrong, or questions of fact, by a mere show of hands, so to speak. The observations to the effect that "the law is what the Supreme Court says it is" and that "the court follows the election returns" afford somewhat cynical corroboration of the acceptance of the power of other-direction. And what if the legislature or the court were solemnly to declare that 2 plus 2 equal 5? That is the dilemma to which the predominance of other-direction eventually must lead. J.G.L.



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1. BETTER BEARINGS — Today's SKF Traction Motor Bearing has multiplied bearing life in years and miles. SKF's bearings can be run substantially longer between servings. Big reason behind this accomplishment has been an extraordinary amount of Traction Motor Bearing design development and better manufacturing methods. Backing up superior quality is...

2. FIELD SERVICE — At SKF this means thirty years of the closest cooperation with Traction Motor builders and the railroads. The result is bearings that provide highest load carrying capacity. Improved maintenance has kept pace with improved bearings due to the adoption by many railroads of SKF's remarkable...

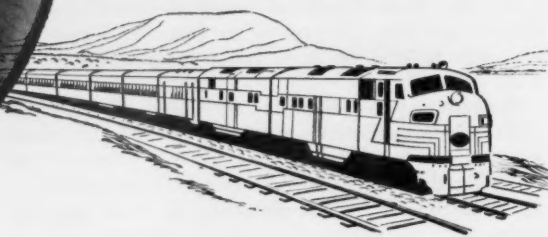
3. FACTORY INSPECTION SERVICE — Safety and Economy are the objectives of this SKF service, developed to keep traction motors on the job. Cost to the railroads is $\frac{1}{3}$ to $\frac{1}{2}$ the cost of new bearings.

Bearings returned to SKF are inspected:

- If cage and both rings pass rigid factory inspection, bearing is reassembled with new rollers, rewrapped and returned.
- If cage and outer ring pass inspection, but inner ring is no longer usable, the bearing is reassembled with new rollers and new inner ring.
- If outer ring is no longer usable, entire bearing is scrapped, and no charge is made for inspection.

4. FIELD CLINICS and now SKF SOUND SLIDE FILMS

— Thousands of railroad men have profited from attending SKF "Clinics", and, today, thousands more see SKF's full-color, 35 mm sound slide film, "How to Inspect Traction Motor Bearings." Result: Economies for the roads and better bearing performance and bearing service life.



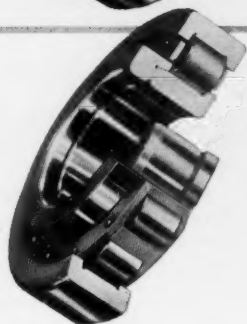
Bearing Program

railroads



The **SKF** Pinion End Roller Bearing

Cylindrical rollers of maximum length and diameter, accurately crowned, provide greatest possible capacity for the space allowed. Roller riding cage is easier to lubricate. This advanced design cage retains all previous **SKF** design improvements, provides quick disassembly and easy inspection of all bearing surfaces.



The **SKF** Commutator End Roller Bearing

Accurately stabilizes the armature and holds it in position in the proper position in the motor frame. Crowned rollers as in the pinion end bearing provide maximum capacity. Equipped with roller riding cage, making possible quick and easy disassembly for inspection of all bearing surfaces.

For Quick Service

Call Your **SKF** Authorized Traction Motor Bearing Distributor

Wherever your road operates, there's an authorized **SKF** Traction Motor Bearing Distributor who can help you with the best and most economical solution to bearing problems. **SKF**'s program of continuous instruction in the proper care and application of traction motor bearings keeps him fully informed. The **SKF** Traction Motor Bearings he supplies are the best you can buy. **SKF** Authorized Traction Motor

Bearing Distributors are strategically located to serve the railroads of the United States. They carry complete stocks of not only Traction Motor Bearings and generator bearings, but all other types of **SKF** anti-friction bearings as well. Ready and willing to serve you day and night, they can be depended upon to help you "KEEP 'EM ROLLING."

7881



SKF INDUSTRIES, INC., PHILADELPHIA 32, PA.,
manufacturers of **SKF** and HESS-BRIGHT® bearings.

Supply Trade

John W. DeLind, Jr., has resigned as chairman of **Borg-Warner International Corporation**.

Kenneth V. Dawson has been named sales engineer for **Kaiser Steel Corporation's** Napa, Cal., Fabricating Division plant. Mr. Dawson will be headquartered at Napa and will handle contacts with engineers and designers in general fabricating work.

Three new railroad distributors have been appointed by the **Koehring Company**, Milwaukee. The **Mississippi Valley Supply Company**, 80 East Jackson blvd., Chicago, has been named to succeed the **Hillsman Equipment Company** in the Chicago area; **Red-Co**, 30 Church st., New York, has taken over eastern territory formerly covered by **Eastern Railway Supplies, Inc.**; and **T. C. Johnson Company**, 923 Midland bldg., Cleveland, has replaced **Stanley H. Smith & Co.** in that area.

W. S. McChesney, manager of aluminum foil product sales, **Aluminum Company of America**, has been appointed manager of industry sales, directing activities of Alcoa's architectural, railroad and automotive industry sales groups.

George H. Garraway, who has been with the **New York Air Brake Company** since June 1954, has been appointed director of manufacturing.

G. L. McMillin, assistant vice-president—steel foundry, **Canadian Car & Foundry Co.**, has been named vice-president—steel foundry.

Richard Relf, who has been employed in various districts of **Gould-**



JAMES C. RYAN, retired superintendent maintenance equipment—system for the **New York Central**, who has been named vice-president of the **Matisa Equipment Corporation**, at Chicago. Mr. Ryan will head all the company's equipment and field operations.

National Batteries, Inc., has been made district manager in the Cleveland area.

OBITUARY

Robert Smith, 50, chief architect of the **Austin Company**, died July 31, following a heart attack. Mr. Smith was primarily responsible for the architectural design of the original units of the diesel locomotive shops of **Electro-Motive Division** of **General Motors Corporation** at La Grange, Ill., and of the research laboratories of **American Rolling Mill Company** at Middletown, Ohio.

Securities

WM Plans to Pay Off Dividend Arrearages

Plans to pay off, before the end of this year, all dividend arrearages on its first preferred stock have been announced by the **Western Maryland**.

The payment would be made in lieu of a recapitalization plan, under which the road had proposed to pay off the arrearages by issuance of new stock (*Railway Age*, February 15, 1954, page 11; November 1, 1954, page 66). That plan was approved by the Interstate Commerce Commission, but the company was then enjoined by a New York court from putting it into effect.

Dividend arrearages on the WM's 7% cumulative first preferred stock, will total, as of next December 31, \$108.50 per share, or \$19,250,070. Funds for the payment will be obtained through: (1) Treasury cash; (2) an unsecured bank loan of not more than \$6 million, to run for two years, which is already reported to have been "heavily oversubscribed"; and (3) sale, to present holders of first and second preferred and common stocks, of new common shares, on a basis of one new share for each six shares presently held, regardless of class. The new stock would be offered at a price below the market at the time the stock is actually sold.

At a special meeting to be held October 10, stockholders will be asked to approve issuance of 128,597 shares of new common; to change the par value of the common stock from \$100 per share to "no par"; and to authorize the directors to issue and sell not over \$5 million of new first mortgage bonds "when deemed advisable." Issuance of such bonds is not considered advisable at present, the company says. The new common, if approved by stockholders and the ICC, will equal one share for each six of the presently outstanding 177,420 shares of first preferred, 61,290 shares of second preferred and 532,868 shares of common. Stockholders will also be asked to approve a limitation

TOO MUCH SPECIALIZING IN TRANSPORT EDUCATION?

Education in the field of transportation is in danger of becoming too narrow and too specialized. This could lead to a shortage of men adequately trained to make high policy decisions, a **Columbia University** professor has warned.

Speaking at a two-day seminar on transport education held at the new transportation center on the **Evanston** campus of **Northwestern University**, Dr. Ernest W. Williams suggested broader studies for men preparing for transportation work.

The seminar was conceived to explore the present status of education and research in transportation and to suggest means by which the new center might best develop its future program. In discussion following Dr. Williams' talk, those attending suggested that specialized work should not generally be given to undergraduates. They also suggested that the center concentrate on fundamental research which would benefit all segments of the industry. It should attempt to develop new and more precise methods of analysis and better techniques for reaching sound economic decisions.

Another suggestion: Make a detailed study of the role of government in transportation regulation, taxation and promotion.

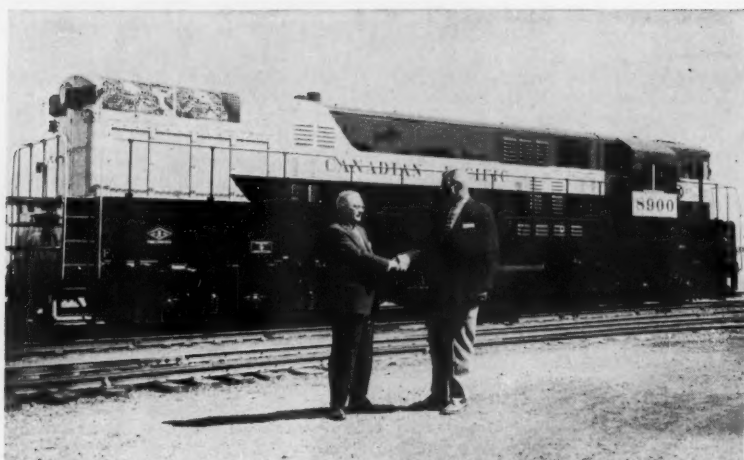
on accumulation of dividends on the first preferred, and to make the stock callable.

New York, New Haven & Hartford.—*Stock Option Plan.*—**New Haven** stockholders have approved a stock option plan which would make available for purchase by officers and employees of the company 200,000 shares of unissued common stock. Subject to approval by the board of directors, officers and employees would be authorized to purchase one share of stock for each \$100 of annual income, at the highest price at which the stock sold in the open market on the day prior to the date of the individual agreement. Included in the 200,000 shares covered by the plan are blocks of 25,000, 10,000 and 2,000 shares, already approved for purchase by, respectively, Patrick B. McGinnis, president, William K. Tate, vice-president—freight traffic, and Harvey E. Hales, chief mechanical officer. Price for these shares is reported to be \$34.25, which was considered the fair market price when the arrangement was first authorized by the board in March (*Railway Age*, March 7, page 54).

Dividends Declared

ATLANTA & WEST POINT.—\$1, payable August 1 to holders of record July 25.

CLEVELAND & PITTSBURGH.—special guaranteed, 50¢, quarterly; 7% guaranteed, 87½¢, quarterly; both payable September 1 to holders of record August 10.



THIS 2,400-HP "TRAIN MASTER," said to be the most powerful single-unit diesel locomotive in Canada, has just been delivered to the Canadian Pacific by the Canadian Locomotive

Company. In the foreground are D. S. Thomson, left, CPR vice-president, and George A. Mueller, who is senior vice-president of Canadian Locomotive.

tendent of the Western district, with headquarters at Omaha.

B. M. Whitehouse, chief fire inspector, has retired after 39 years of service, and the position has been abolished.

Mr. Goodwin joined the C&NW in 1943 as assistant chief mechanical officer. He was appointed chief mechanical officer in 1945, vice-president in



J. E. Goodwin

KANSAS CITY SOUTHERN.—common, 75¢, quarterly, payable September 15 to holders of record August 31; 4% non-cumulative preferred, 50¢, quarterly, payable October 15 to holders of record September 30.

NASHVILLE, CHATTANOOGA & ST. LOUIS.—\$1, quarterly, payable September 1 to holders of record August 10.

READING.—4% non-cumulative 1st preferred, 50¢, quarterly, payable September 8 to holders of record August 18.

SOUTHERN.—common, 75¢, quarterly; 5% non-cumulative preferred, 62½¢, quarterly; both payable September 15 to holders of record August 15.

WESTERN OF ALABAMA.—\$2, payable August 1 to holders of record July 25.

be sold by competitive bidding with interest rates to be determined by such bidding.

CHICAGO & ILLINOIS MIDLAND.—To issue without competitive bidding \$7,600,000 of unsecured 4¼% serial notes to mature December 1, 1976. Of the total issue, \$6,600,000 would be issued to the Commonwealth Edison Company of Illinois, holder of all the C&IM capital stock, the remaining \$1,000,000 to be sold to trustees of the Edison Company service annuity fund. Proceeds from the sale would be used to finance in part purchase from the Electro-Motive Division, General Motors Corporation, of 4 1,200-hp diesel-electric switch engines at an estimated unit cost of \$117,416, and 5 1,750-hp diesel-electric road switchers at a unit cost of \$195,914, making the estimated total cost \$1,449,234. Of the notes to be issued to the Edison Company, \$4,000,000 would cover cash advances of that amount previously received from the company, the remainder to be issued in exchange for and to discharge \$1,000,000 of 4% serial notes and \$1,600,000 of 5% serial notes now held by the Edison Company.

Security Price Averages

	August 2	Prev. Week	Last Year
Average price of 20 representative railway stocks	95.06	96.66	71.91
Average price of 20 representative railway bonds	98.95	99.28	95.81

Authorization

DELAWARE & BOUND BROOK.—To extend the date of maturity of \$1,800,000 of first mortgage consolidated bonds from August 1, 1955 to August 1, 1970, the bonds to bear interest at 3¼% during the extended period (*Railway Age*, July 18, page 40). The Reading, the parent company, was authorized to assume liability as guarantor of the bonds in connection with a proposed resale of them, under exemption from competitive bidding requirements, to the Mutual Benefit Life Insurance Company and the Penn Mutual Life Insurance Company.

Applications

CHICAGO, BURLINGTON & QUINCY.—To assume liability for \$4,350,000 of equipment trust certificates to finance in part purchase of the following equipment at a total estimated cost of \$5,490,000:

Description and Builder	Estimated Unit Cost
10 2,400-hp diesel-electric locomotives (Electro-Motive Division, General Motors Corporation)	\$260,000
10 1,200-hp diesel-electric locomotives (Electro-Motive)	110,000
10 stainless steel, gallery type suburban cars (The Budd Company) ...	179,000
The certificates, dated September 1, would mature in 30 semiannual installments of \$145,000 each beginning March 1, 1956. They would	

Railway Officers

CHICAGO & NORTH WESTERN.—**J. E. Goodwin**, vice-president in charge of operation at Chicago, has been elected executive vice-president, and **Joseph J. Stein**, assistant vice-president—operation, has become vice-president in charge of operation. The road's passenger and freight operations have been separated, with **F. E. Harrison**, formerly general manager of transportation, becoming general manager of freight transportation, and **C. C. Shannon**, general superintendent, Western district, at Omaha, appointed general manager of passenger transportation.

Robert O. Small, vice-president in charge of traffic, has retired after 45 years of service with the company.

R. W. Heron, superintendent of transportation for the C&NW system, has been appointed general superin-

1948, and vice-president in charge of operation in 1952. Prior to joining the C&NW he had served with several other roads.

Mr. Stein joined the road in 1917. After advancing through a number of positions he became general superintendent of the dining car department in 1944. Subsequently, he held the posi-



Joseph J. Stein

tions of assistant general manager, general superintendent, Eastern district, and general manager of transportation. He became assistant vice-president—operation in 1953.

DONORA SOUTHERN-HANNIBAL CONNECTING-LAKE TERMINAL - McKEESPORT CONNECTING - NEWBURGH & SOUTH SHORE-NORTHAMPTON & BATH.—**Tom B. Clarke** has been appointed assistant secretary and assistant treasurer of these roads at Pittsburgh, Pa.

DULUTH, MISSABE & IRON

RANGE.—Clesson H. Wiles has been appointed purchasing agent at Duluth, Minn., succeeding **Hugh Greenfield**, who has retired after almost 50 years of service. **John M. Whalen** has been appointed assistant purchasing agent.

ERIE.—Lawrence J. Burgott, assistant general freight agent at Chicago, has been appointed assistant freight traffic manager at New York. **Frank K. Corlett**, general agent at Akron, Ohio, has been appointed assistant general freight agent at Buffalo, N.Y., succeeding **Louis E. Newman**, who has been transferred to Chicago to replace Mr. Burgott. **Henry F. Heck**, general agent at Washington, D.C., has been transferred to San Francisco, succeeding **Harold F. Keelen**, who replaces Mr. Corlett at Akron. **George A. Kiel**, general agent at Des Moines, has been transferred to Baltimore, succeeding **George Pettersen**, who succeeds Mr. Heck at Washington. **John L. Fisher** replaces Mr. Kiel as general agent at Des Moines. Mr. Fisher was formerly commercial agent at Chicago.

Christian H. Schlegel, supervisor of stations and car service for the Mahoning division at Youngstown, Ohio, has been promoted to freight agent at Scranton road freight house, Cleveland, succeeding **J. Howard Byers**, deceased.

The office of **Arthur J. Schilling**, superintendent of employment, has been moved from New York to 12th and Coles streets, Jersey City 2, N.J.

GRAND TRUNK WESTERN.—**H. A. Sanders**, general superintendent at Detroit, has been appointed general superintendent of transportation at that point. The position of general superintendent has been abolished.

HIGH POINT, THOMASVILLE & DENTON.—**Fred J. Flagler**, special traffic representative, who served as general freight agent from 1924 to 1954, retired August 1, after 47 years of railroad service.

KANSAS CITY SOUTHERN.—**R. J. Blair, Jr.**, superintendent, Louisiana and Arkansas division, at Shreveport, La., has been appointed assistant general manager there. His successor is **R. E. Canty**. **C. W. Bates** has been named superintendent of safety and transportation rules examiner, and **D. F. Nicola** has become assistant superintendent of transportation, both at Shreveport. **T. D. Saar, Jr.**, has been appointed assistant superintendent terminals at Port Arthur, Tex.

LONG ISLAND.—**Palmer S. Mock**, superintendent at Jamaica, N.Y., has been named assistant to general manager at Pennsylvania station, New York. Mr. Mock has been assigned to the full-time job of coordinating and supervising all LI matters in construction of the new Penn-

sylvania station. He will work closely with representatives of the **Pennsylvania** and **Webb & Knapp, Inc.**, on all details of the program affecting LI operations. **Russell D. Spore**, assistant superintendent of the Pennsylvania's Eastern division at Toledo, Ohio, succeeds Mr. Mock as superintendent of the Long Island at Jamaica.

M. C. Marquet has been appointed freight traffic manager at Pennsylvania Station, New York, succeeding **K. M. Potter**.

LOUISVILLE & NASHVILLE.—**J. E. Hammett**, traveling engineer at Nashville, Tenn., has been appointed assistant to general master mechanic at Louisville, Ky.

J. L. Davis and **J. B. Clark** have been appointed assistant directors of personnel at Louisville, Ky. **W. R. Winkler**, assistant division superintendent at Louisville, has been appointed superintendent of the Louisville division, succeeding Mr. Clark. **I. W. Newman**, superintendent of the Cincinnati division at Latonia, Ky., has been transferred to the Montgomery, New Orleans and Pensacola division at Mobile, Ala., succeeding **M. R. Black**, who replaces Mr. Newman on the Cincinnati division. **R. B. Jones**, assistant division superintendent at Paris, Tenn., has been transferred to the Montgomery, New Orleans and Pensacola division at Mobile, succeeding **E. E. Sullivan**, who replaces Mr. Winkler at Louisville. The position of assistant superintendent at Paris has been abolished.

NORTHERN PACIFIC.—**F. W. McCabe**, superintendent at Fargo, N.D., has retired after nearly 45 years of service. His successor is **D. H. King**, assistant to vice-president, operating department, at St. Paul, who in turn has been succeeded by **G. N. Page**, assistant to general manager at St. Paul. **K. A. Box**, assistant superintendent at Seattle, replaces Mr. Page, and in turn has been replaced by **R. K. Mossman**, trainmaster at Duluth. **J. F. Peterson** has been transferred from Forsyth, Mont., to succeed Mr. Mossman at Duluth, and in turn has been replaced by **C. M. Gullickson**, trainmaster at Livingston, Mont. **J. O. Davies**, assistant superintendent at Spokane, has been promoted to special assistant to vice-president, operating department, at St. Paul. **B. V. Coyer**, inspector of train dispatching and transportation at St. Paul, succeeds Mr. Davies. **D. E. Carlson**, trainmaster at Yakima, Wash., has been named assistant superintendent at Tacoma, succeeding **E. M. Price**, who has retired after more than 43 years of service. **L. F. Wiecking**, trainmaster at Spokane, has been transferred to Yakima, succeeding Mr. Carlson. **J. G. Heimsjo**, conductor on the Lake Superior division, has been appointed trainmaster at Butte, Mont., and **C. W. Query**, general agent at Bellingham, Wash., has become trainmaster at Pasco, Wash.

A. B. Johnson, supervisor of wages

at St. Paul, has been named assistant to general superintendent of transportation there. His successor is **C. B. Wolf**, assistant superintendent, Yellowstone division, at Glendive, Mont., who in turn has been succeeded by **R. E. Schuett**, trainmaster at Jamestown, N.D. **J. H. Hertog**, trainmaster-roadmaster at Mandan, N.D., replaces Mr. Schuett, and in turn has been replaced by **H. W. Johnstone**, division roadmaster at Minneapolis. **W. W. Walters**, trainmaster at Tacoma, has been appointed assistant superintendent, Rocky Mountain division, at Missoula, Mont., succeeding **H. Livesey**, who has retired after more than 37 years of service. **E. M. Overlie**, trainmaster-roadmaster at Bemidji, Minn., succeeds Mr. Walters, and in turn has been succeeded by **C. E. Johnson**, roadmaster on the NP's Red River branch.

F. C. Sempf, eastern manager of industrial properties, has been named general manager of industrial properties at St. Paul, replacing the late **J. E. Thames**. Mr. Sempf's successor is **A. J. Tetzner**, industrial agent at St. Paul. **H. E. Hickey**, industrial agent, succeeds Mr. Tetzner, without change of title, as the ranking industrial agent. **R. A. Juba**, chief draftsman, replaces Mr. Hickey.

Frank A. Cleveland, western freight traffic manager in charge of rates and divisions at Seattle, retired July 1 after 44 years of service. The new head of the western rates and divisions department is **L. S. Davis**, assistant general freight agent at Seattle, who has been given the title of general freight agent. **O. W. Cobb, Jr.**, traffic assistant at Seattle, replaces Mr. Davis. **George A. Holm**, traveling freight and passenger agent at Birmingham, Ala., has been appointed general agent in charge of the traffic office at Buffalo, N.Y., succeeding **J. W. Price**, transferred to Minneapolis.

E. C. Estes, assistant to mechanical engineer, has been named mechanical engineer at St. Paul, succeeding **H. B. Hoesly**, resigned.

J. F. Dille, assistant district storekeeper at Brainerd, Minn., has been appointed division storekeeper at St. Paul, replacing **F. G. Drieling**, who has retired after 46 years of service.

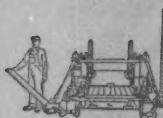
SANTA FE.—**O. H. Osborn**, assistant general manager, Gulf lines, at Galveston, Tex., has been appointed assistant to operating vice-president at Chicago. **G. B. Dreisbach** has been named supervisor freight claim prevention at Topeka, Kan., succeeding **L. A. Davis**, promoted.

F. H. Hemphill, assistant general freight agent at Los Angeles, has been appointed general freight agent at Chicago, replacing **Clarence O. Bunce**, who has been named general freight and passenger agent at Phoenix, Ariz. **F. J. Wright** has been appointed assistant general freight agent at San Francisco, succeeding the late **George T. Hurst**. **A. A. Moser**
(Continued on page 68)

IS YOUR PROBLEM WEED CONTROL?



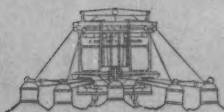
W24 SERIES A WEED MOWER features cutting bars which are hydraulically operated by an engine-driven pump. Sickles are driven by hydraulic motors. A special safety snap-sickle design kicks back from obstructions and resets automatically. Swaths can be changed without stop. Can cut up to almost fifteen feet on either side of track centerline.



M5 SERIES A WEED MOWER provides fast, efficient cutting at minimum cost. An automatic cutter bar release, heavy-duty sickles and clutch-equipped engines highlight its performance characteristics.



W44 SERIES D WEED BURNER is a tow unit designed for short lines and limited burning. Two outer burning arms are counterbalanced for easy operation. Unit can be operated entirely from within cab.



W55 SERIES B WEED BURNER is an unusually thorough and efficient weed killer and snow melter. Burner heads can be positioned quickly and easily. Flame reaches vegetation regardless of roadbed contour.



W66 SERIES B WEED SPRAYER is a self-propelled unit fitted with two sets of differently sized nozzles which may be used together or separately. Minimum crew. Three-speed, two-way drive with fluid coupling.



W78 SERIES A WEED SPRAYER is a trailer-type unit which applies liquid weed killers. Lightweight, compact, low cost. Features include a two-cylinder engine, 800-gallon tank and eleven-nozzle spraying action.

You'll find the answer at *Fairmont*

If weed control is one of your maintenance problems, we know you will want to give careful consideration to the Fairmont products pictured above. For they represent Fairmont's finest answers to virtually every weed control problem with which you might be confronted. Regardless of the method best suited to your needs . . . regardless of the amount of service you might require of your equipment . . . and regardless of the investment you are able to make . . . you will find the answer at

Fairmont! And in choosing Fairmont, you will be assuring yourself of the finest in design . . . in craftsmanship . . . in dependability . . . and in economy of operation. For these qualities are *standard equipment* in every product that bears the famous Fairmont name plate. Truly, in the field of weed control, as in every other area of maintenance operation, Fairmont stands pre-eminently alone . . . and offers still further proof that Fairmont is your finest source for every maintenance need.

FAIRMONT RAILWAY MOTORS, INC., FAIRMONT, MINNESOTA

MANUFACTURERS OF INSPECTION, SECTION AND GANG CARS, HY-RAIL CARS, MOTOR CAR ENGINES, PUSH CARS AND TRAILERS, WHEELS, AXLES AND BEARINGS, BALLAST MAINTENANCE CARS, DERRICK CARS, OIL SPRAY CARS, GROUTING OUTFITS, TIE RENEWAL EQUIPMENT, RAIL RENEWAL EQUIPMENT, WEED CONTROL EQUIPMENT.



Diesel fuel additive **to relieve filter-plugging and injector-sticking problems**

In an effort to reduce operating costs, the railroads have recently done considerable work with catalytic-cracked and blends of cat-cracked and straight-run diesel fuels.

Engine performance problems

With the cooperation of the refiners, much progress has been made by the railroads in the efficient use of these fuels. However, there are a number of problems inherent in such a change of fuels—some of them having a direct bearing on the performance of diesel engines.

Filter-plugging—which is likely to result in injector-sticking—has been one of these problems.

To solve it, many refiners are now us-

ing a Du Pont additive, FOA-2, to stabilize cracked distillates and overcome incompatibility between blends of cracked and straight-run stocks. Many of the leading railroads are reporting excellent results with No. 2 fuel oils containing FOA-2.

Good filterability

Du Pont FOA-2 is a dispersant as well as a stabilizer. And because of its excellent dispersant action, it improves the filterability of diesel fuels. In this way, it helps to *eliminate most injector-sticking and filter-plugging problems.*

In addition, being an ashless, non-metallic additive, Du Pont FOA-2 does not contribute to the exhaust stack spark-

ing problem. It is economical, too, since it is effective in low concentrations.

Developing new additives for improved fuel and lubricant performance is a continuing project of the Du Pont Petroleum Laboratory. For more complete information on Du Pont FOA-2 and other new Du Pont additives, address your request to any of our regional offices listed below.



**Better Things for Better Living
... through Chemistry**

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Petroleum Chemicals Division • Wilmington 98, Delaware

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IN CANADA: Du Pont Company of Canada Limited—Petroleum Chemicals Division—80 Richmond Street West, Toronto 1, Ontario
OTHER COUNTRIES: Petroleum Chemicals Export—Nemours Bldg., 6539 Wilmington 98, Delaware

John Nolfo, veteran Rock Island employee, points to a dating nail he placed in this pressure-cresoted tie in 1909.



Rock Island gets average life of **30 YEARS** from pressure-cresoted ties



Tracks of the Rock Island railroad at Blue Island, Ill. All the ties in the system are pressure-cresoted.

• The dating nail in the photograph shows this to be one of the first pressure-cresoted ties put into service on the Chicago, Rock Island and Pacific Railroad. 1909 was the year the Rock Island began using pressure-cresoted ties in quantity, and many of these ties are still in service.

The average life of pressure-cresoted ties on this road is 30 years.

This long life is the reason why the Rock Island system has been completely "pressure-cresoted" since 1922. Careful treating with modern methods and yearly tie inspections have brought replacements among the 29 million ties in the system down to less than 2.5% per year . . . appreciably below the national average for first class railroads.

This is the kind of service you get from pressure-cresoted ties and you can count on top performance from ties and timber treated with uniform USS Creosote. For further information, contact our nearest Coal Chemical Sales office listed below or write directly to United States Steel Corporation, 525 William Penn Place, Pittsburgh 30, Pa.

USS CREOSOTE

5-1226

SALES OFFICES IN PITTSBURGH, NEW YORK, CHICAGO, CLEVELAND, SAN FRANCISCO AND FAIRFIELD, ALA.



UNITED STATES STEEL

Organizations

Meetings and Conventions

The following list gives names and addresses of secretaries, and dates and places of next or regular meetings.

AIR BRAKE ASSOCIATION.—Lawrence Wilcox, Room 827, 80 E. Jackson Blvd., Chicago 4. Annual meeting September 12-14, 1955, Hotel Sherman, Chicago.
ALLIED RAILWAY SUPPLY ASSOCIATION.—C. F. Well, P. O. Box 5522, Chicago 80. Exhibit in conjunction with Coordinated Mechanical Association meeting, September 12-14, 1955, Hotel Sherman, Chicago.
AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS.—T. R. Stanton, 1450 Railway Exchange Bldg., St. Louis 1.

AMERICAN ASSOCIATION OF PASSENGER RATE MEN.—R. H. Chermak, 702 Union Station, Chicago.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Blum, Eastern Time Table Distributing Company, Liberty Street Terminal, New York 6. Annual meeting, September 22-25, Chateau Frontenac, Quebec.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5. Annual meeting, June 5-7, 1956, LaSalle Hotel, Chicago.

AMERICAN ASSOCIATION OF TRAVELING PASSENGER AGENTS.—C. A. Melin, P. O. Box 5025, Cleveland 1. Annual meeting, October 7, 1955, New York. October 8-14, Tour to Bermuda on Queen of Bermuda.

AMERICAN COUNCIL OF RAILROAD WOMEN.—Amy Mitchell, Atlanta & West Point, Atlanta 3. Annual meeting, October 3-5, 1955, Waldorf Astoria, New York.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5. Annual meeting, September 19-21, 1955, Conrad Hilton Hotel, Chicago.

AMERICAN RAILWAY CAR INSTITUTE.—W. A. Renz, 19 E. 47th St., New York 17.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION.—F. E. Wolf, Canadian Pacific, Toronto 1, Ont. Annual meeting, April 22-25, 1956, Peabody Hotel, Memphis.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in cooperation with the Association of American Railroads, Engineering Division.—Neal D. Howard, 59 E. Van Buren St., Chicago 5. Annual meeting, March 13-15, 1956, Palmer House, Chicago.

AMERICAN RAILWAY MAGAZINE EDITORS ASSOCIATION.—C. P. McCallum, New York, New Haven & Hartford, Room 2050, Grand Central Terminal, New York. Annual meeting, September 28-October 1, 1955, Broadmoor Hotel, Colorado Springs, Colo.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.—C. E. Huntley, 2000 Massachusetts Ave., N.W., Washington 6, D. C. Annual meeting, October 11-12, 1955, Hotel Morrison, Chicago.

AMERICAN SOCIETY FOR TESTING MATERIALS.—R. J. Painter, 1916 Race St., Philadelphia 3. Spring meeting, February 27-March 2, 1956, Hotel Statler, Buffalo. Annual meeting and exhibit, June 17-22, 1956, Chalfonte-Haddon Hall, Atlantic City. Pacific Area meeting and exhibit, September 16-22, 1956, Hotel Statler, Los Angeles.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—C. E. Davies, 29 W. 39th St., New York 18.

RAILROAD DIVISION.—R. L. Wilson, American Brake Shoe Company, Mahwah, N. J.

AMERICAN WOOD-PRESERVERS ASSOCIATION.—W. A. Penrose, 839 Seventeenth St., N. W., Washington 6, D. C. Annual meeting, April 23-25, 1956, Jung Hotel, New Orleans.

ASSOCIATED TRAFFIC CLUBS OF AMERICA.—P. DeGroote, Luckenbach Steamship Co., Inc., 110 S. Dearborn St., Room 1107, Chicago 3. Annual meeting, September 18-21, 1955, Hotel Cleveland, Cleveland.

ASSOCIATION OF AMERICAN RAILROAD DINING CAR OFFICERS.—P. E. Griffith, 2028 Clark Ave., St. Louis 3. Annual meeting October 11-13, 1955, Shoreham Hotel, Washington, D. C.

ASSOCIATION OF AMERICAN RAILROADS.—George M. Campbell, Transportation Bldg., Washington 6, D. C.

Operations and Maintenance Department.—R. G. May, Vice-president, Transportation Bldg., Washington 6, D. C.

Operating-Transportation Division.—A. I. Ciliske, 59 E. Van Buren St., Chicago 5.

Transportation Section.—H. A. Eaton, 59 E. Van Buren St., Chicago 5.

Operating Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5.

Communications Section.—A. H. Grothmann, 59 E. Van Buren St., Chicago 5.

Fire Protection and Insurance Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5. Annual meeting, October 3-5, 1955, Lord Baltimore Hotel, Baltimore.

Freight Loss and Damage Prevention Section.—G. H. Ruhle, 59 E. Van Buren St., Chicago 5.

Freight Station Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5.

Medical and Surgical Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5.

Protective Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5.

Safety Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5.

Electrical Section of the Engineering and Mechanical Divisions.—S. W. Marras, 59 E. Van Buren St., Chicago 5.

Engineering Division.—E. G. Gehrke, 59 E. Van Buren St., Chicago 5.

Construction and Maintenance Section.—Neal D. Howard, 59 E. Van Buren St., Chicago 5. Annual meeting, March 13-15, 1956, Palmer House, Chicago.

Signal Section.—R. H. C. Balliet, 59 E. Van Buren St., Chicago 5. Annual meeting, October 11-13, 1955, Jung Hotel, New Orleans.

Mechanical Division.—Fred Perotto, 59 E. Van Buren St., Chicago 5.

Purchases and Stores Division.—John L. Timanus, Transportation Bldg., Washington 6, D. C. Annual meeting, May 16-18, 1956, Jefferson Hotel, St. Louis.

Freight Claim Division.—R. E. O'Donnell, 59 E. Van Buren St., Chicago 5.

General Claims Division.—Bruce H. Smith, 59 E. Van Buren St., Chicago 5.

Car Service Division.—Arthur H. Gass, Chairman, Transportation Bldg., Washington 6, D. C.

Finance, Accounting, Taxation and Valuation Department.—Arthur R. Seder, Vice-president, Transportation Bldg., Washington 6, D. C.

Accounting Division.—R. E. Keefe, Transportation Bldg., Washington 6, D. C. Annual meeting, May 28-31, 1956, Los Angeles.

Treasury Division.—R. E. Keefe, Transportation Bldg., Washington 6, D. C. Annual meeting, October 3-6, Roney Plaza, Miami Beach.

ASSOCIATION OF UNIVERSITY COMMERCE COMMISSION PRACTITIONERS.—Miss Sarah F. McDonough, Executive Secretary, 2218 ICC Building, Washington 25, D. C.

ASSOCIATION OF RAILROAD ADVERTISING MANAGERS.—A. W. Eckstein, Illinois Central, 135 E. Eleventh Pl., Chicago 5. Annual meeting January 26-28, 1956, Hotel Biltmore, New York.

BUYERS AND SUPPLY ASSOCIATION.—L. R. Gurley, Modern Railroads, 201 N. Wells St., Chicago 6.

CANADIAN RAILWAY CLUB.—G. R. Fitt, Canadian Pacific Railway, Windsor Station, Montreal 3, Quebec. Regular meetings, second Monday of each month, except June, July and August. Sheraton-Montreal Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS.—E. S. Walsh, 2606 Scott Ave., St. Louis 3. Regular meetings fourth Tuesday of each month except June, July, August and December, Hotel DeSoto.

CAR DEPARTMENT OFFICERS ASSOCIATION.—F. H. Stremmel, 6536 N. Oxford Ave., Chicago 31. Annual meeting, September 12-14, 1955, Hotel Sherman, Chicago.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—W. R. McCain, Mather Stock Car Company, 326 N. Michigan Ave., Chicago 1. Regular meetings, second Monday of each month except June, July and August, LaSalle Hotel.

CENTRAL RAILWAY CLUB OF BUFFALO.—J. A. Gorman, 1817 Hotel Statler, Buffalo 5. Regular meetings, second Thursday of each month except June, July and August, Hotel Statler.

CHICAGO RAILROAD DIESEL CLUB.—E. C. Fodick, 813 Sunnyside Ave., Chicago 40. Regular meetings first Thursday after first Sunday of each month except July and August, Hotel Sherman, 7:30 p.m. and August, Midland Hotel, at 12:15 p.m.

CHICAGO RAILROADS CAR ACCOUNTING OFFICERS.—Max Jauch (chairman), Chicago & North Western, 4809 N. Ravenswood Ave., Chicago 40. Regular meetings, last Wednesday of each month, except July.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—H. C. Rochester, Canadian National, 891 Notre Dame St., West, Montreal 3. Next meeting, November 10-11, 1955, Brown Hotel, Louisville.

EASTERN CAR FOREMEN'S ASSOCIATION.—W. P. Disard, 30 Church St., New York 7. Regular meetings, second Friday of January, February, March, April, May, October and November, 29 W. 39th St., New York.

LOCOMOTIVE MAINTENANCE OFFICERS ASSOCIATION.—C. M. Lipcomb, 1721 Parker St., North Little Rock, Ark. Annual meeting, September 12-14, 1955, Hotel Sherman, Chicago.

MAINTENANCE OF WAY CLUB OF CHICAGO.—E. C. Patterson, 400 W. Madison St., Chicago 6. Regular meetings, October through April, Hamilton Hotel, Chicago.

METROPOLITAN MAINTENANCE OF WAY CLUB.—John S. Vreeland, Simmons-Bordman Publishing Corp., 30 Church St., New York 7. Meets in February, April, October and December. Next meeting, October 1955, Railroad-Machinery Club, 30 Church St., New York, 6:30 p.m.

MILITARY RAILWAY SERVICE VETERANS.—F. W. Okie, Union R.R., Frick Bldg., P. O. Box 536, Pittsburgh. Annual meeting, September 16-18, 1955, Netherland-Plaza Hotel, Cincinnati.

MISSISSIPPI VALLEY MAINTENANCE OF WAY CLUB.—P. E. Odom, 1025 Frisco Building, 906 Olive St., St. Louis. Regular meetings, second Monday of each month September through May, DeSoto Hotel, St. Louis.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—R. Everett Kreeger, 7413 New Post Office Bldg., P. O. Box 684, Washington 4, D. C. Annual meeting, October 24-27, 1955, Grove Park Inn, Asheville, N. C.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS.—H. E. Bingham, Spencer Chemical Company, Dwight Bldg., Kansas City, Mo. Annual meet-

ing, October 11-13, 1955, William Penn Hotel, Pittsburgh.

NATIONAL DEFENSE TRANSPORTATION ASSOCIATION.—Mrs. Lois C. Gebran, Suite 728, 1001 Connecticut Ave., Washington 6, D. C. Annual meeting, October 12-15, 1955, Sheraton Plaza Hotel, Boston.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE.—L. J. Dorr, Suite 909, Sheraton Bldg., 711 14th St., Washington 5, D. C. Annual meeting, November 17-18, 1955, Conrad Hilton Hotel, Chicago.

NATIONAL RAILWAY APPLIANCE ASSOCIATION.—Kenneth Cavins, Fairmont Railway Motors, Inc., 310 S. Michigan Ave., Chicago 4, Lewis Thomas, Asst. Sect., 59 E. Van Buren St., Chicago 5.

NATIONAL SAFETY COUNCIL RAILROAD SECTION.—C. T. DeWitt, Northern Pacific, St. Paul 1, Minn. Annual meeting, October 17-21, 1955, Hotel Morrison, Chicago.

NEW ENGLAND RAILROAD CLUB.—William M. McCombs, 35 Lewis Wharf, Boston 10. Regular meetings, second Tuesday of each month, except June, September, incl. Hotel Vendome, Boston.

NEW YORK RAILROAD CLUB.—John Barry, 30 Church St., New York 7. Regular meetings, third Thursday of each month except June, July, August, September and December. Century Room, Commodore Hotel. Reception, 6 p.m.; dinner, 7; meeting 8:15.

NORTHWEST CARNIVAL ASSOCIATION.—J. Maglich, Minnesota Transfer Ry., 2071 University Ave., St. Paul 4, Minn. Regular meetings, first Monday of each month, except June, July, and August, Midway Club, 1931 University Ave., St. Paul.

NORTHWEST LOCOMOTIVE ASSOCIATION.—W. N. Cox, Northern Pacific, St. Paul 1, Minn. Regular meetings, third Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul.

NORTHWEST MAINTENANCE OF WAY CLUB.—L. C. Blanchard, Milwaukee Passenger Depot, Minneapolis 1. Regular meetings, fourth Thursday of each month, September through April, inclusive, excepting November and December which are third Thursday, Midway Club, 1931 University Ave., St. Paul.

PACIFIC RAILWAY CLUB.—S. E. Byler, 121 E. Sixth St., Los Angeles 14. Regular meetings, second Thursday of each alternate month at Palace Hotel, San Francisco, and Elks' Temple, Los Angeles.

RAILROAD PUBLIC RELATIONS ASSOCIATION.—J. Don Parel, Association of American Railroads, Transportation Bldg., Washington 6, D. C.

RAILWAY CLUB OF PITTSBURGH.—C. E. Morrison, 2710 Koppers Bldg., Pittsburgh 9. Regular meetings third Thursday of each month, except June-September, incl. and December, William Penn Hotel.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS ASSOCIATION.—L. R. Oswald, Thos. A. Edison, Inc., 1500 S. Western Ave., Chicago 8.

RAILWAY FUEL AND TRAVELING ENGINEERS ASSOCIATION.—L. H. Peters, New York Central, Room 1213, 139 W. Van Buren St., Chicago 5. Annual meeting, September 12-14, 1955, Hotel Sherman, Chicago.

RAILWAY PROGRESS INSTITUTE.—J. A. Nooner, Jr., First National Bank Bldg., Chicago. Annual meeting, November 18, 1955, Conrad Hilton Hotel, Chicago.

RAILWAY SUPPLY MANUFACTURERS ASSOCIATION.—A. W. Brown, 527 Lexington Ave., New York 17.

RAILWAY SYSTEMS AND PROCEDURES ASSOCIATION.—J. W. Milliken, Railway Age, 30 Church St., New York 7. Next meeting, December 6-8, 1955, Hotel Morrison, Chicago.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—C. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7. Meets with Communications Section of AAR.

RAILWAY TIE ASSOCIATION.—Roy M. Edmonds, 1221 Locust St., St. Louis 3. Annual meeting October 26-28, 1955, Peabody Hotel, Memphis.

ROADMASTERS AND MAINTENANCE OF WAY ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5. Annual meeting September 19-21, 1955, Conrad Hilton Hotel, Chicago.

ST. LOUIS RAILROAD DIESEL CLUB.—F. C. Whitlock, Terminal Railroad Association of St. Louis, 376 Union Station, St. Louis 3. Regular meetings second Tuesday of each month, Hotel York, Dinner, 6:45 p.m. meeting 8.

SIGNAL APPLIANCE ASSOCIATION.—C. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7. Meets with AAR Signal Section.

SOUTHEASTERN RAILWAY DIESEL CLUB.—H. W. Brewer, Seaboard Air Line, P. O. Box 1654, Norfolk, Va. Regular meetings, second Tuesday in February, April, June, August, October and December, 9:30 a.m., Mayflower Hotel, Jacksonville.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—A. T. Miller 4 Hunter St., S. E. Atlanta. Regular meetings, third Thursday in January, March, May, and November at Atlanta.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—F. I. Umhau, Southern Ry., Atlanta 3.

TORONTO RAILWAY CLUB.—H. W. Somerville, P. O. Box 8, Terminal "A," Toronto 1, Ont. Regular meetings, fourth Monday of each month except February, June, July, August and December, Royal York Hotel.

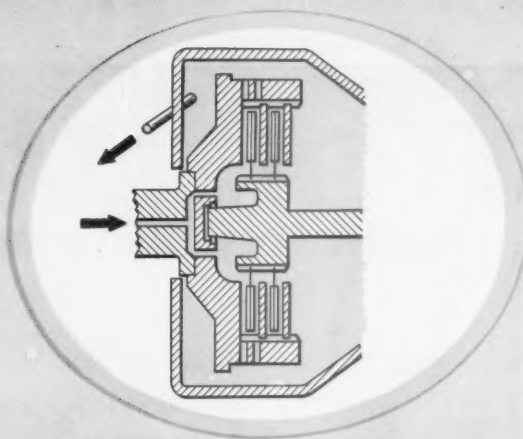
TRACK SUPPLY ASSOCIATION.—Lewis Thomas, Q and C Company, 59 E. Van Buren St., Chicago 5.

WESTERN ASSOCIATION OF RAILWAY TAX COMMISSIONERS.—L. R. Norberg, 516 W. Jackson Blvd., Chicago 6. Regular meetings, 12:15 p.m. first Wednesday of each month, except July and August, Traffic Club, Palmer House, Chicago.

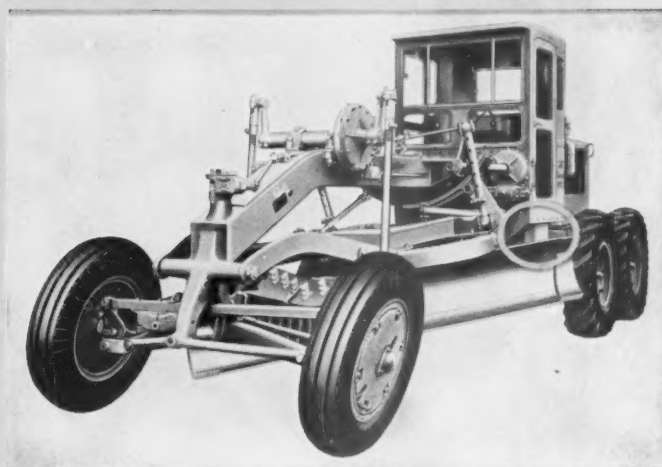
WESTERN RAILWAY CLUB.—E. E. Thulin, Suite 339, Hotel Sherman, Chicago 1, next meeting, October 24, 1955.

**CATERPILLAR ANNOUNCES
ANOTHER "FIRST":**

NEW OIL CLUTCH for the NO. 12 MOTOR GRADER



Arrows show path of oil through housing with clutch disengaged. Facings remain cool and bathed in oil, which is carried to outlet at top by flywheel ring gear. The two steel clutch discs and clutch brake are faced with pressure-processed cork, which gives an excellent coefficient of friction and long wear.



The new oil clutch for the No. 12 Motor Grader gives you the same reliability and improved performance as the thoroughly job-proved oil clutch in Caterpillar track-type Tractors. Rugged and reliable, it uses oil from the engine lubrication system. Here are some of the things the new oil clutch for the CAT* No. 12 can mean to *you*:

LONGER WORK LIFE—In actual on-the-job tests, clutch facings wear less than the thickness of a human hair in one thousand hours' operation! Thick clutch facings mean that work life is extended thousands of hours before discs need be replaced. And constant "oil bath" lubrication reduces wear on all moving parts.

LESS MAINTENANCE—Adjustment every 1500 hours is not unusual, after initial "break in." This is equivalent to nearly nine months without ad-

justment on road maintenance work! No external lubrication is needed: internal oil system lubricates pilot and throwout bearings.

GREATER EFFICIENCY—The clutch is constantly cooled, never exceeding normal engine oil temperature. This practically eliminates clutch fade, greatly reduces slippage due to overheating, and means that the clutch retains "like new" operation for thousands of hours.

Caterpillar Tractor Co., Peoria, Illinois, U. S. A.

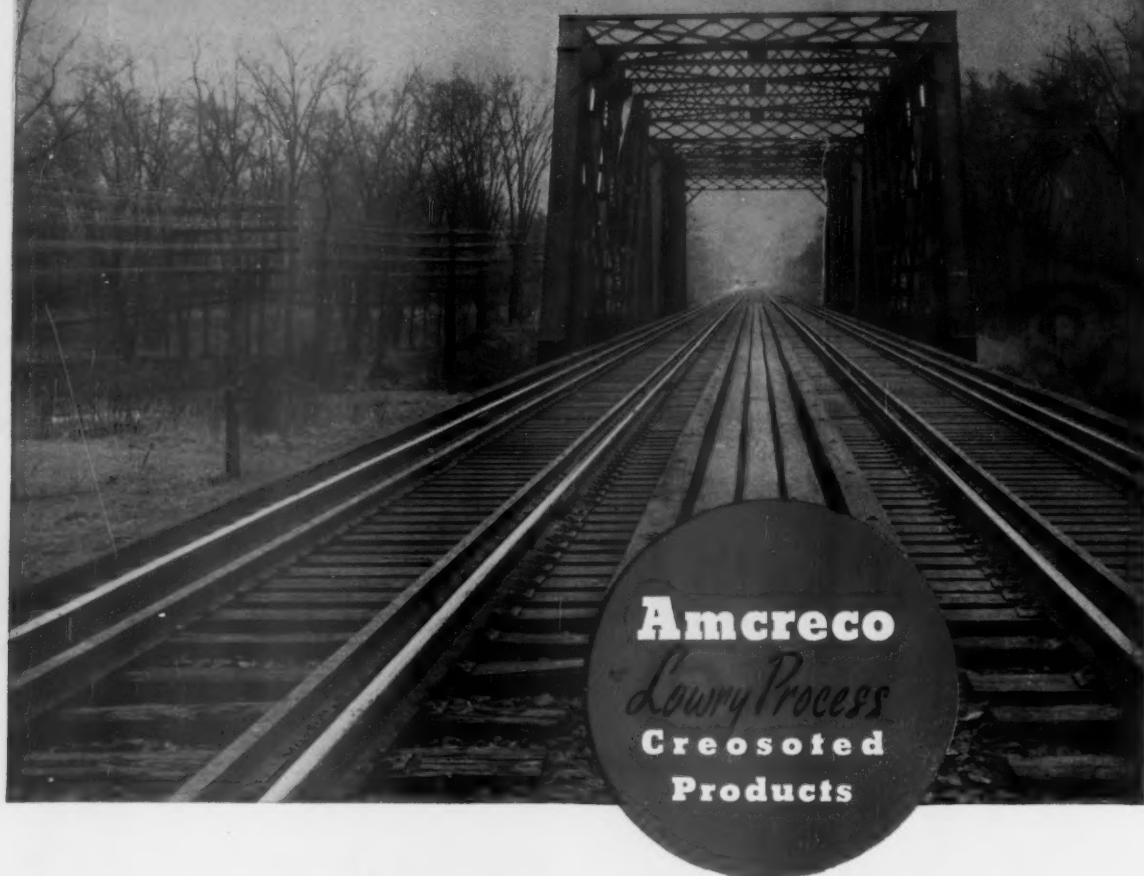
CATERPILLAR*

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main line to lower maintenance costs



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**Adzed and
Bored Cross Ties
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Piles
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●

Just as railroad service has improved through the years—so has the quality of AMCRECO cross ties, bridge ties, piles and timbers. Through continuing research in the last quarter of a century, the service life of Amcreco creosoted products has been greatly extended. Improvements in our basic Lowry process of Creosoting under Pressure have given a green light to construction and maintenance economy. Write for a full explanation.

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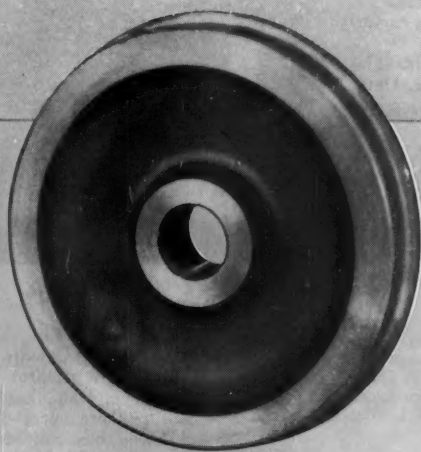
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INDUSTRIAL TV

FOR RAILROADS ...via Graybar

Industrial Television (closed-circuit TV) is one of the railroad industry's most promising tools. To date, it has been successfully employed to (1) speed up work in classification yards by checking car numbers of inbound trains. (2) to keep a watchful eye on important switching points from a central office. ITV can be employed anywhere that inspection and control is needed or should be supplemented.

The Diamond "400" UtiliVue camera, shown, is manufactured by the famous Diamond Power Specialty Corporation. The equipment is simple to install, maintain and operate. No specially trained operators are required. It can be used with a regular TV receiver and/or monitor. An inexpensive coaxial cable transmits a quality picture equal to that of most commercial TV broadcasts. Servicing can be done by railroad personnel using the complete service manuals, any competent TV repair shop, or by contract through a nationally known organization, if desired.

Everything you need for a complete Diamond ITV installation is available from one responsible source—Graybar. Here, as in Outdoor Construction, Wiring, Lighting and Communications, a Graybar Specialist is at your service.



SEND FOR THIS FREE BOOKLET

"SEE WHERE YOU CAN'T LOOK" is an illustrated brochure containing further details on the various uses and technical specifications of UtiliVue ITV. Check your Handbook for your nearby Graybar Representative or write: Graybar Electric Co., Inc., 420 Lexington Avenue, New York 17, N. Y.

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100,000 electrical items
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OFFICES AND WAREHOUSES IN OVER 120 PRINCIPAL CITIES

Railway Officers



UNION PACIFIC.—Edwin C. Schafer, assistant to general director of public relations, who has been appointed director of public relations at Omaha (*Railway Age*, June 27, page 55).

(Continued from page 60)

has been named assistant general freight agent at San Francisco. **L. C. Hudson** succeeds Mr. Hemphill as assistant general freight agent at Los Angeles.

H. C. Willis, who has been on leave of absence, has resumed his former position as superintendent, Oklahoma



O. H. Osborn

division, at Arkansas City, Kan., succeeding **W. T. Richardson**.

Dale McGrath, auditor disbursements at Topeka, Kan., has been appointed auditor there, succeeding **Clem O. Clark**, who has retired after 49 years of service. Mr. McGrath's successor is **W. E. Willingham**, assistant to general auditor at Chicago.

OBITUARY

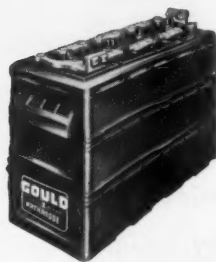
George T. Hurst, 60, who just retired as assistant general freight agent of the **Santa Fe** at San Francisco, died July 28 in that city.



**"Battery Performance
is my Business!"**

Your Gould Field Engineer has one job—to make sure you get greatest possible service from your batteries. In performing that job he sees to it that your batteries are properly cared for and maintained; he instructs your personnel in systematic maintenance methods; he helps you anticipate battery needs; he makes sure you get maximum battery performance.

Gould Field Engineering Service is nationwide. Every member is factory-trained . . . has plenty of on-the-job know-how. There's a Gould Field Engineer in your area. He's as near to you as your telephone. Call him. And when you see him, ask him for the new Gould Plus-Performance Plan material for your battery maintenance staff.



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Always Use Gould-National Automobile and Truck Batteries



A NEW... RAILWAY AGE

Digest of Articles

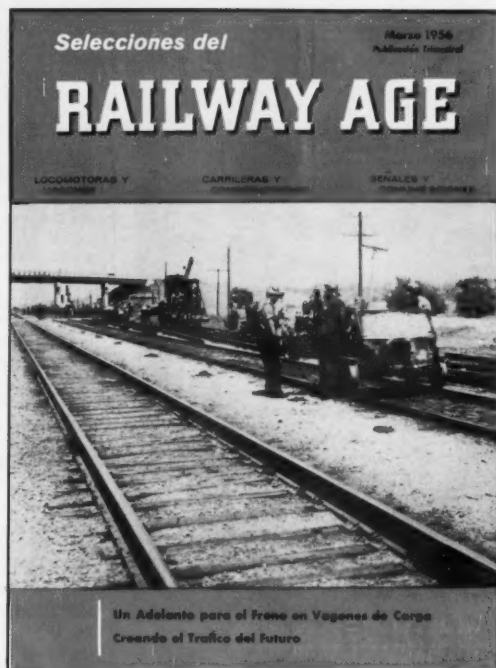
from Railway Age and its companion departmental magazines, Railway Locomotives and Cars, Railway Track and Structures, Railway Signaling and Communications . . . covering the whole range of U. S. railway equipment, fixed facilities and aids to operations.

"A quarterly review in Spanish, based upon the most important technical articles of Railway Age and your monthly railway papers would be a product which the majority of the responsible officers in railway management would want to have in their libraries."

Officer of South American Railway System

Publication in Spanish for

Latin America



FIRST ISSUE

MARCH

1956

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**Published
Quarterly**

Selecciones del Railway Age will provide a quarterly report in Spanish of North American railway developments in equipment and facilities for Latin American readers. All important news of locomotives, freight cars, passenger cars, shops, track and structures, signaling and communications, all kinds of devices and equipment for railway operations, accounting and record-keeping will be covered. Each of these many features will have a New Products Section to focus attention on the opportunities that U. S. products offer Latin American railways.

Emphasis editorially will be on how the U. S. railways are doing things and what they are adopting, buying, installing to improve their operations.

Selecciones del Railway Age will be a full-fledged 9" x 12" magazine with a comprehensive editorial content sectionalized and labeled throughout for easy use and reference. An important directory feature will be the listing of export sales offices of United States companies serving the Latin American market. From cover to cover it will be the type of magazine that will be kept, used and passed along for reference.

Selecciones del Railway Age will be distributed among the executive and technical officers of the railroads in every country in Latin America, including the Spanish speaking islands of the Caribbean. The pledge of co-operation from railways below the border insures comprehensive distribution throughout Latin America.

Selecciones del RAILWAY AGE

A SIMMONS-BOARDMAN PUBLICATION

Letter from a Reader

A "Hunting License"?

WASHINGTON, D.C.

TO THE EDITOR:

As you know, the current debate—to be greatly intensified during the coming months—over the relative positions of various forms of land transport under federal regulation, will call upon all interested parties to give most serious concern and best judgment to the issues.

Certainly there is an obligation on the part of those publishing in the

transportation field to make certain, as best they can, that this debate is squarely founded upon facts. This holds, regardless of the prejudices or views of various types of transportation.

This makes all the more astounding and disappointing your editorial of July 18th titled "A 'Hunting License' for the Common Carriers?," in which you class the contract motor carriers of the trucking industry with private and exempt and unregulated carriers, when you must certainly know that this segment of the industry is strictly regulated by the Interstate Commerce Commission, or the state commissions.

If such careless handling of the true facts in the matter is due to ignorance on the part of the author of the editorial, you would do him a service by handing him the attached folder, "What IS a Contract Motor Carrier?"

It seems to me to represent the contract motor carrier as being unregulated does considerable disservice to railroad people as well as the general public included among your readers.

VEE H. KENNEDY
Manager,
Contract Carrier Conference

[The folder which Mr. Kennedy refers to makes the statement that contract carriers are "subject to the exact same regulation that common carriers must face."

As far as competition in transportation is concerned, the important component of regulation is the authority of the regulators over actual rates charged. The regulators have this authority in the case of common carriers. They do not have it over the contract carriers—which, as a matter of fact, do not even have to report their actual rates to the ICC. Also, "certificates" to operate as common carriers are a lot harder to come by than "permits" for contract carriers.

If Mr. Kennedy will agree that common carriers should have exactly the same degree of regulation as contract carriers, no more and no less, then we shall be very happy to agree with him.

As for as "careless handling of the true facts" is concerned—our contention was and is that common carriers are a great deal more severely regulated than contract carriers are. Mr. Kennedy, on the other hand, asserts in his leaflet that the two classes of carriers are "subject to the exact same regulation." We will leave it to those who know the actual facts to decide whether it is Mr. Kennedy or ourselves who is guilty of carelessness in dealing with them.—EDITOR]



Better, More Economical ... via DIFFERENTIAL

The yawning bucket drops a huge chunk of waste into this Differential Air Dump Car. Next time the "Sunday Punch" may be tons of red-hot slag.

For day in, day out service under the rigors of steel mill loading practice, these Differentials perform to the point where steel mills are buying more and more every year.

Unusually rugged design and construction, plus heat resistant floors, when indicated, are part of the answer. Out at the dump it's a matter of seconds to unload completely anything that can be loaded — dumping to either side. It all adds up to better, more economical transportation via Differential.

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DIFFERENTIAL PRODUCTS INCLUDE: Air Dump Cars, Charging Box Cars, Ingot Mold Cars, Locomotives, Mine Cars, Mine Supply Cars, Rock Larries, Mantrip Cars, Dumping Devices and Complete Haulage Systems.



SINCE 1915—PIONEERS
IN HAULAGE EQUIPMENT

Current Publications

PERIODICAL ARTICLES

HARDY OF ACF INDUSTRIES. *Fortune*, August 1955, pp. 110-111. *Time Inc.*, 9 Rockefeller plaza, New York 20. Single copies, \$1.25.

A brief review of what Charles J. Hardy, Jr., chief executive officer and chairman of the board, has done for ACF since his association with it in 1944.

MOVING AHEAD: RAILWAY EXPRESS SPENDS \$60,000,000, by Donald C. Spaulding. *Nation's Business*, July 1955, pp. 66-69.

(Continued on page 76)



New L-M Station Platform Lighting Improves Operations at Havre, Mont.

The full 1500-foot length of the Great Northern's Havre, Mont., station platforms is lighted to an average of 1.98 foot candles by a new Line Material incandescent lighting installation.

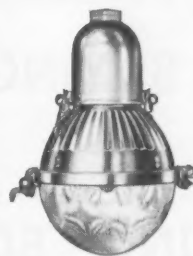
The lighting system consists of 40 L-M Spherolites®, mounted on mastarms or catenary supports. On the station-side platform, six Spherolites are supported by 4-foot brackets on steel poles, four are mounted on brackets attached to the building, and another ten are suspended from a catenary support.

On the platform between east- and west-bound trains, the fewest possible support poles were desired. To achieve this, Great Northern engineers designed a catenary support system. Poles are spaced 300 feet apart with four luminaires suspended from a messenger and a 7/16-inch guy strand in each of five spans. End poles were installed offset to counteract the inward pull of the 6000-pound loading of cable and lighting units.

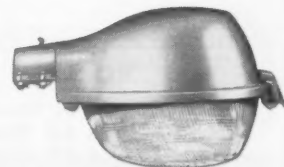
The units are equipped with 500-watt incandescent lamps. Four luminaires on the station side provide Type II distribution; all the others Type I. According to C. G. Nelson, Assistant Electrical Engineer of the Great Northern, the new installation and better lighting have improved operations, speeded service and baggage handling, and increased passenger comfort at this important western division point.

Get Complete Information on L-M Outdoor Lighting

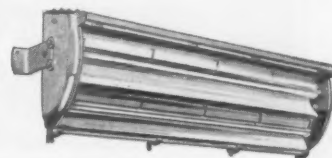
L-M offers a full line of incandescent, mercury vapor, and fluorescent lighting for streets, yards, approaches, areas. Get in touch with the L-M Field Engineer for complete information and bulletins; or write Railway Sales Department, Line Material Company, Milwaukee 1, Wisconsin (a McGraw Electric Company Division).



L-M's Spherolite Luminaire, the type used in the Great Northern Havre Station Platform installation. The Spherolite is a highly efficient unit, providing wide choice of light distribution, many desirable features. It may be used for either incandescent or mercury vapor lamps.



L-M's Ovalite™, specially designed for mercury vapor, is available in both series and multiple styles, a highly efficient unit with service-safe features.



L-M's 2- and 4-lamp fluorescent units are particularly desirable for lighting areas such as classification yards, because of their extremely low glare factor.



LINE MATERIAL

Street Lighting

Railroad Diesel Equipment

excellent operating condition

FOR SALE OR RENT

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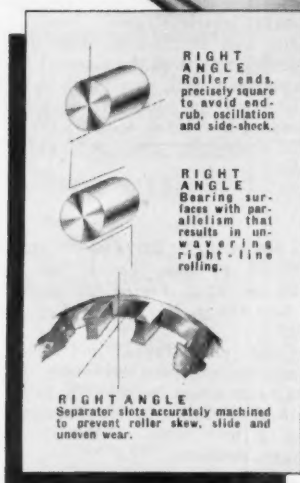
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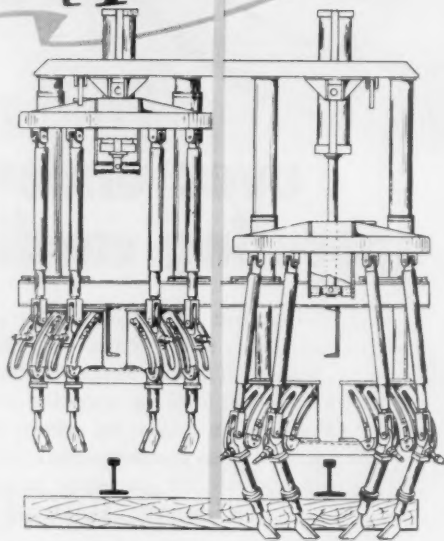
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Current Publications

(Continued from page 72)

Chamber of Commerce of the United States, 1615 H st., N.W., Washington 6, D.C.

Company which started in a carpet-bag adds helicopters, walkie-talkies, new rolling stock and streamlined administration.

MILK RUN. *Courier Magazine*, July 1955, pp. 11, et seq. Courier bldg., Deposit, N.Y. Single copies, 25 cents, plus 5 cents mailing charge.

The tiny Unadilla Valley Railroad, only 49 miles long, still serves faithfully after 60 years of operating. The line makes most of its money serving creameries and delivering feed to dairy farmers—hence the title. Rail fans will enjoy the 18 photographs which accompany the article.

LIGHTWEIGHT TRAINS—AT LAST, by Francis Bello. *Fortune*, July 1955, p. 110 et seq. Time Inc., 9 Rockefeller plaza, New York 20. Single copies, \$1.25.

New trains—lighter, faster, cheaper—may give railroads their last chance to win travelers away from buses, planes and automobiles. Five designs, including one from the General Motors Corporation, will soon reach the rails. Others will be built by the Pullman-Standard Car Manufacturing Company, ACF Industries and the Budd Company.

A PORTFOLIO OF GREAT AMERICAN LOCOMOTIVES, by Clyde Carley. True, August 1955, pp. 53-60. Fawcett Publications, Inc., 67 West 44th st., New York 36. Single copies, 25¢.

Color photographs, and brief explanatory captions, of some famous American steam locomotives, beginning with the "Collis P. Huntington," and ending with some of the latest and largest steamers.

NEW BOOKS

CAR AIR BRAKES, by C. M. Drennan. 153 pages, "Chalk Talks" illustrations. Simmons-Boardman Publishing Corporation, 30 Church st., New York 7. \$4.75.

Volume Two of the air brake study course written by the originator of the famous air brake "Chalk Talks" uses 100 Chalk Talk diagrams and 41 photographs along with concise text matter to explain clearly the functions and operation of up-to-date freight and passenger car air brake devices and equipment. Quizzes, with keys to answers, appear throughout the book to aid in classroom or home study.

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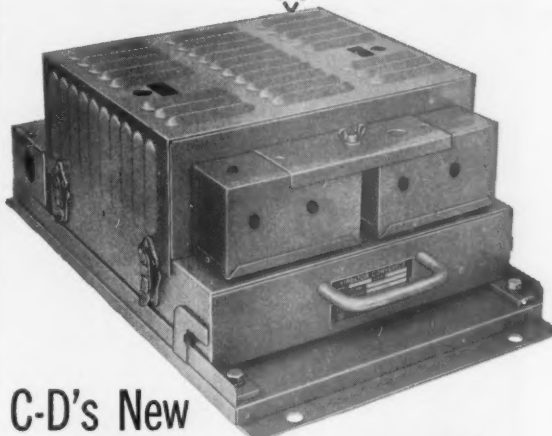
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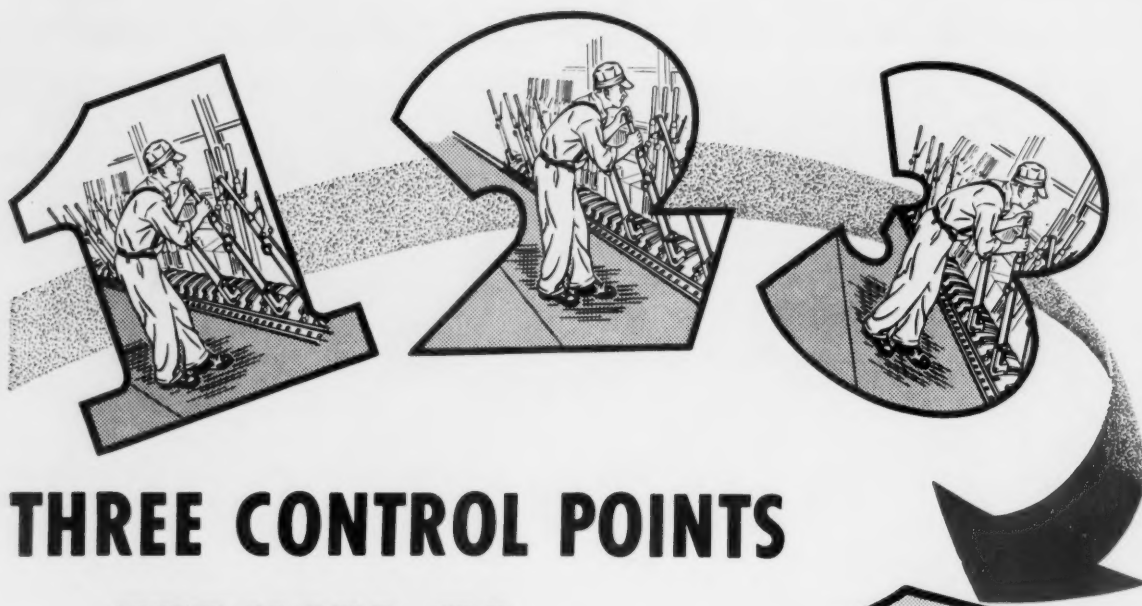


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